

**REPUBLIC OF IRAQ**

**MINISTRY OF PLANNING**

**Iraq “Social Fund for Development” Project  
(SFDP)**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

**FOR THE  
REHABILITATION OF ELECTRICITY DISTRIBUTION GRID  
IN 3 VILLAGES (AL BODELF, AL BOTEMAH, AND AL  
AHBAB VILLAGES)**

**IN  
SALAH AL-DIN GOVERNORATE**

**7<sup>th</sup> December 2019**

## **Table of Contents**

<b>LIST OF ABBREVIATIONS .....</b>	<b>5</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>6</b>
<b>1. INTRODUCTION .....</b>	<b>31</b>
<b>2. PROJECT DESCRIPTION.....</b>	<b>34</b>
2.1 Objective of the Maintenance Works.....	35
2.2 Scope of Work .....	36
2.3 Design Data.....	36
<b>3. BASELINE CONDITIONS.....</b>	<b>37</b>
3.1 The Project Area .....	37
3.2 Environmental and Social Baseline Conditions .....	38
3.2.1 Climate.....	38
3.2.2 Air Quality.....	40
3.2.3 Site Topography and location.....	41
3.2.4 Land use.....	43
3.2.5 Seismic Activities.....	43
3.2.6 Flooding.....	43
3.2.7 Noise .....	43
3.2.8 Heritage Environment.....	43
3.2.9 Traffic Level .....	43
3.2.10 Land Acquisition.....	43
3.2.11 Social Aspects .....	43
<b>4. LEGAL ASPECTS .....</b>	<b>45</b>
4.1 Iraqi environmental legislations .....	45
4.2 The World Bank Safeguards Policies .....	46
4.2.1 OP/BP 4.01 - environmental assessment procedure.....	46
4.2.2 OP/BP4.12 the key Operational Policy.....	46
4.2.3 OP/BP 4.11 Physical Cultural Resources .....	47
4.3 WBG EHS: The Environmental, Health, and Safety (EHS) Guidelines .....	47
<b>5. IMPACT ASSESSMENT AND MITIGATION MEASURES.....</b>	<b>48</b>
5.1 Construction Phase .....	48

5.2	Operational Phase .....	48
<b>6.</b>	<b>ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN .....</b>	<b>50</b>
<b>7.</b>	<b>ENVIRONMENTAL AND SOCIAL MONITORING PLAN.....</b>	<b>62</b>
7.1	Environmental and Social Monitoring.....	62
7.2	ESMP Institutional Arrangements .....	62
7.3	Reporting requirements .....	67
7.4	Capacity Development and Resources Requirements .....	67
<b>8.</b>	<b>PUBLIC CONSULTATION RESULTS .....</b>	<b>69</b>
8.1	Consultation Process:.....	69
8.2	Consultation Results:.....	69
<b>9.</b>	<b>GRIEVANCE REDRESS MECHANISM.....</b>	<b>70</b>
<b>10.</b>	<b>ANNEXES.....</b>	<b>72</b>
	Annex (1): Grievance Form.....	72
	Annex 2: Public Consultations form.....	73
	Annex (3): Public Consultation.....	74
	Annex 4: Mitigation Measures during Rehabilitation Phase .....	112
	ANNEX (5): Electrical grid Lines Photos .....	122

**List of Figures**

figure 1:	Google Earth Image Showing The Working Area .....	8
Figure 2:	Current Situation Of Electristy Grid In Al Bodelf Village(Left) And Al Botemah Village (Right).....	10
Figure 3:	Current Situation Of Electristy Grid In Al Ahabab Village .....	10
Figure 4:	Electrical Grid Lines Within Al Bodelf , Al Botemah, And Al Ahabab Villages .....	35
Figure 5:	Google Earth Image Showing the Working Area Under Study.....	38
Figure 6	Monthly Wind Velocity (M/S) From 2004-2012 .....	39
Figure 7 :	Monthly Mean Temperature C° From 2007-2012 .....	40
Figure 8:	Google Earth Image Showing The Working Area In Al Botemah Village .....	41
Figure 9:	Google Earth Image Showing The Working Area In Al Bodelf Village .....	42
Figure 10:	Google Earth Image Showing the Working Area In Al Ahabab Village .....	42

## **List of Tables**

Table 3-1: Monthly Mean Wind Speed .....	39
Table 3-2: Monthly Mean Temperature .....	39
Table 3-3: WHO Ambient Air Quality Guidelines (EHS World Bank guidelines) .....	40
Table 4-1: Applicable Laws and Regulations in Iraq .....	45
Table 5-1: Summary of Impact Assessment during Construction.....	48
Table 6-1: Environmental Management Plan (ESMP) during Construction Phase of electrical distribution grid lines.....	51
Table 6-2: Environmental Management Plan (ESMP) during Operation Phase of electrical distribution grid lines.....	58
Table 7-1: Monitoring Activities During Rehabilitation Phase .....	63
Table 7-2: Monitoring Activities during Operation Phase.....	65
Table 7-2: Capacity Development Requirements .....	68
Table 9-1: Contact Information for GRM .....	71

## **LIST OF ABBREVIATIONS**

<b>ESMP</b>	<b>Environmental and Social Management Plan</b>
<b>EHS</b>	<b>Environmental, Health, and Safety</b>
<b>ESMF</b>	<b>Environmental and Social Management Framework</b>
<b>EMF</b>	<b>Electrical Magnetic Field</b>
<b>GIIP</b>	<b>Good International Industry Practice</b>
<b>GOI</b>	<b>Government of Iraq</b>
<b>GRM</b>	<b>Grievance Redress Mechanism</b>
<b>MOE</b>	<b>Ministry of Environment</b>
<b>MOP</b>	<b>Ministry of Planning</b>
<b>MOELEC</b>	<b>Ministry of Electricity</b>
<b>MSDS</b>	<b>Material Safety Data Sheets</b>
<b>NO</b>	<b>Nitrogen Oxides</b>
<b>OP</b>	<b>Operational Policy</b>
<b>OPGW</b>	<b>Optical Ground Wire</b>
<b>PAPs:</b>	<b>Project Affected Peoples</b>
<b>PPE</b>	<b>Personal Protective Equipment</b>
<b>RAP</b>	<b>Resettlement Action Plan</b>
<b>RE</b>	<b>Resident Engineer</b>
<b>SFD</b>	<b>Social Fund Development</b>
<b>SO<sub>2</sub></b>	<b>Sulfur Dioxide</b>
<b>TOR</b>	<b>Terms of Reference</b>
<b>WB</b>	<b>World Bank</b>
<b>WHO</b>	<b>World Health Organization</b>

## **EXECUTIVE SUMMARY**

With the recent liberation of Mosul from ISIS, Iraq faces a historic opportunity for national reconciliation through the effective delivery of critical social services, economic growth and recovery programs. The reinstatement of trust between the State and its citizens is highly dependent on the Government of Iraq (GOI) demonstrating its capacity to deliver security, jobs and economic growth to all Iraqis, with a focus on the poor, the vulnerable and the millions of Internally Displaced People (IDP). The GOI has embarked on a comprehensive reform of social protection programs. Two major achievements were the shift from categorical to poverty targeting in social assistance that improved outreach to the poor; and the issuance of the new integrated Social Insurance Law that is likely to have a positive impact on labor mobility and fiscal rationalization of the pension's fund.

Complementing this work, the GOI, represented by the Ministry of Planning (MOP), requested the World Bank's support in the design and financing of a Social Fund for Development (SFD) project to support locally driven initiatives to improve the living conditions and opportunities of the poor and most vulnerable in Iraq.

The GOI has demonstrated its commitment and support to the design of this operation and established a high-level national team to guide and coordinate the development and institutionalization of the SFD, as well as five technical teams to work on the different aspects of the fund. These teams developed the design of the SFD, and the draft SFD law. The SFD would thus be established by law, as an autonomous institution that does not operate under civil service regulations. While SFD law is being formulated and issued, the Ministry of Planning (MOP), at the central and local levels, specifically by the Directorate General of Poverty Reduction Strategy, will initiate SFD activities in three governorates in the first year, then expand to another four in the second year, and ultimately scale-up to the rest of the country starting in year three of project implementation.

The Project Development Objectives (PDOs) are to: (1) Improve access to basic services and; (2) Increase short-term employment opportunities, in targeted communities.

This executive summary reflects the main issues (subprojects description and activities, baseline conditions, impact analyses, mitigation measures and monitoring arrangements) of the Environmental and Social Management Plan (ESMP) conducted for the rehabilitation of three grid distribution lines in Salah Al-Din governorate. This ESMP is prepared in accordance to the EMF requirements of the SFD project. The main objective of the ESMP is to examine the environmental and socio-economic impacts of the subprojects (at both construction and operation phases), and to propose mitigation measures.

## PROJECT DESCRIPTION

The Project is located in the Governorate of Salah al-din at northeast of Baghdad. Tikrit is the administrative center of Salah al-din Governorate and its located 140 kilometers (87 mi) northwest of Baghdad and 220 kilometers (140 mi) southeast of Mosul on the Tigris River. Most of the electrical grid lines were damaged and destroyed when ISIS occupied these areas as shown in Annex (5).

Al Bodelf, Al Botemah, and Al Ahbab are villages in Salah Al-Din governorate which are located about 39km,82km, and 119km from Tikrit respectively. The proposed activities in this subproject will involve the supply and installation of oil type poles, overhead cables, circuit breakers and transformers in three villages as shown the table below. These villages are provided with power via connection to existing sub-transmission line which is connected to transmission substation. The grid lines that required to be rehabilitated are within the area in the figure below and are the following:

- **Installing oil type pole-mounted distribution transformers, cables, circuit breakers, and light post as follows:**

Village	Transformers	Circuit Breakers	Cables (m)	Light Post
Al Bodelf	7	14	4800 + 3600	44
Al Botemah	4	8	3200 + 3600	26
Al Ahbab	6	12	8400 + 4800	42

The construction is expected to take place by transporting the poles materials by lorry and assembling the poles on site. Work is expected to take place at several construction locations at the same time. The construction teams at each location would consist of 2-3 crews of 5-10 people, working one after another, Construction works of the electrical grid distribution network in these villages in Salah Al-Din Governorate which is connecting to the residential homes will include the following activities:

1. Providing workers and all the surveying equipment required for the execution of poles works.
2. Conduct shallow excavation work according to the dimensions and methodologies mentioned in the drawings
3. Erection of Poles and casting the foundations of these poles with concrete.
4. Connect all accessories of the poles, stringing with jointing sagging and tensioning of conductors.
5. Installing of Distribution Transformers accessories.



**Figure 1: Google Earth Image showing the working area**

The objective of these subprojects is to rehabilitate the above-mentioned electrical grid lines. The project aims at facilitating the following:

- Link the electricity to people's houses after the war with ISIS.
- Improve the electricity distribution networks.
- Increase the flexibility of providing electricity and therefore providing electricity to schools and other industrial and commercial activities.
- Mitigating the effects of war and ensure a safe return for the displaced people when return to their land.

The rehabilitation works will imply the construction of camps in the areas adjacent to the grid lines. The construction camp will be established near these grid lines on vacant state owned lands for storage of equipment and construction materials. The construction will need about 20-25 local workers per day per subproject. These workers will need to have their accommodation (if there is non-



local worker) facilities in these camps, during the construction phase. No additional land acquisition is needed.

The anticipated duration of construction works is about 6 months.

Works for Rehabilitation of the grid lines on Salah Al-din Governorate will include removing the old and damaged cables, circuit breakers and all other fittings and move them in the store that belongs to the ministry of electricity. Then the work will include installing distribution transformers, overhead cables, circuit breakers and light post. Land that will be used for installing light post is all State-owned land.

The work will also comprise of some civil work such as excavation, lifting the soils and other waste produced during the excavation, and also casting in order to prepare the foundations for the light post.

## **ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS**

The environmental and social baseline data were collected from published research papers and documents. Salah Al-Din governorate is located in the northern mid-East part of Iraq, which has a semi-desertic climate. The major rain, is about 177 mm yearly, falls during the period November thru February, with a spread showering in March. The average annual temperature is 29.7 °C.

The ambient air quality is within normal range. Although no baseline measurements were conducted due to security constraints, it can be assumed that the concentration of pollutants is well below allowable standards since there are no sources for air pollution except for the few vehicles which use the roads near the grid lines. Similarly, noise levels are expected to be below the national standards.

Land in the vicinity of the subprojects is an open area; Land that will be used for rehabilitation is all State-owned land. Construction works of the electrical grid distribution network in these villages in Salah Al-Din Governorate which is connecting to the residential homes. There are no protected areas or endangered species (there is no critical or high biodiversity values that might be affected) in the vicinity of the sites. The sites adjacent areas do not include any historical or cultural sites.

Land that will be used for installing poles and light post is all State-owned land; therefore no additional land for the work is needed to proceed with the subprojects. The photo below and Annex (5) illustrate the environmental situation for some of these distribution lines within the subprojects.



**Figure 2: Current situation of electricity grid in Al bodelf Village(left) and Al botemah Village (right)**



**Figure 3: Current situation of electricity grid in Al Ahbab Village**

## POLICY, LEGAL AND ADMINISTRATIONAL FRAMEWORK

A desk study was carried out to identify and assess the legal and administrative regulations to be applied to project activities. The assessment considered both Iraqi laws and the policies and procedures of the World Bank in addition to the ESMF that was prepared already for this project. A collection of relevant laws and regulations is presented in this section. The objective of this task would be to ensure the project complies with relevant environmental laws and regulations throughout the construction and operation phases of these lines. The table below presents the relevant and applicable laws and regulations.

<b>LAW</b>	
<b>Applicable Iraqi laws</b>	
Law no. 37 of 2008	Describes institutional arrangements of the Ministry of Environment and Outlines policies and roles and responsibilities toward protecting the environment.
Law no. 27 of 2009	Protection and Improvement of Environment
Regulations no. 2 of 2001	Preserving water resources
Law No.3 issued in 1997	Environment protection
Law No. (55) Issued in 2002	Heritage and antiques
Law No. 37 of 2015.	Labor Law No. 37 of 2015.
<b>Applicable WB Policies</b>	
OP 4.01	Environmental Assessment
OP 4.12	Involuntary Resettlement
EHS	Environmental, Health, and Safety guideline
GRM	Grievance Redress Service

## ENVIRONMENTAL AND SOCIAL IMPACT ANALYSIS

Generally, based on the previous visits and surveys, the reconstruction of these grid lines may have impacts on the surrounding environment but they are temporary, reversible and not severe. They are expected to occur during the rehabilitation and operational phases. It is also anticipated to have important positive social impacts on the local communities. While a number of minor impacts on the environment may occur during the two phases, these minor impacts will have no significant influence on the environmental parameters and conditions. The main environmental impacts of the project will be associated with activities during the rehabilitation period. These include air emissions, noise, dust generation and handling of construction and other waste, and health and safety concerns associated with construction workers. Mitigation measures will be implemented to minimize the environmental costs by reducing the identified adverse environmental impacts.

The expected negative environmental impacts include:

- (a) Deterioration of air quality and Noise level resulting from the rehabilitation activities.
- (b) Contamination of soil by construction and municipal waste generated.

From the socio-economic perspective, both the rehabilitation and operational activities are expected to have positive impacts on the communities living in the area. It is also anticipated to have important positive social impacts on the local communities via providing the local workers, using and renting machines and trucks, in addition to the activation the mini markets and restaurants which will enhance the social level. Providing electricity will be significantly enhanced which will facilitate their life activities such as enhance their education, increase the production of agricultural crops and consequently will improve livelihood opportunities.

The construction contractor(s) will be responsible for compliance with the ESMP provisions during the rehabilitation phase of the project. The contractor will be also in charge of undertaking work in a manner which complies with all relevant environmental procedures, adheres to all legislative requirements, and ensures that all environmental objectives associated with the contract are achieved. The overall assessment of the key environmental and social impacts is summarized in the table below.

	<b>Impact</b>	<b>Impact Significance</b>
1	Air Quality	Medium
2	Noise	Medium
3	Water Resources	Low
4	Soil	Low
5	Solid and hazardous wastes	Low
6	Flora & Fauna	Not significant
7	Topography and landforms	Not significant
8	Impacts on local traffic	Low
9	Health and Safety	High
10	Socio-Economic impacts	Medium
11	Child labor	Medium
12	Labor influx	Low
13	Creation of Job opportunities	High

## MITIGATION MEASURES

The required mitigation measures for each of the minor environmental impacts and any adverse socio-economic impacts that may arise have been considered. Furthermore, a complete monitoring and auditing system were suggested for each environmental parameter in order to sustain the environmental situation in the area of the project. These measures should significantly reduce the identified potential minor impacts. The mitigation measures address the environmental and social impacts of the project. They include:

1. Minimize noisy operations to day time, and no constructional activities at night
2. Modern and well-maintained machines will be used to minimize noise generated from machines.
3. Maintain vehicles and machinery in good condition in order to minimize exhaust emissions.
4. Apply water spraying (as needed) using a daily water tanker during the construction works.
5. Avoid discharging or leakages of any chemicals in the site or in open spaces. Plans for preventing leakages will be prepared on site. No discharge of chemicals into the environment will be allowed.
6. Temporary store construction and municipal solid waste in locations agreed with the local municipality authority and community according to the type of waste generated (e.g. solid, household, hazardous). Collect any hazardous waste (if present) and store it in sealed containers prior to disposal in a designated area approved by the authorities.

In terms of hazardous waste the following mitigation should be followed:

- Provide adequate sanitation facilities serving all workers (mentioned in HSE).
- Paints with toxic ingredients or solvents or lead-based paints will not be used
- As there is no ability to return empty containers of hazardous materials to suppliers All waste should be deposited through licensed haulers/transporters to licensed and regulated landfill sites appropriate to the type of waste generated (e.g. solid, household, hazardous).

The following tables summarize the mitigation measures and the monitoring activities which are required to be undertaken to avoid any negative impacts on the environment. Responsibilities and estimated costs are also presented.

### Mitigation Measures during Rehabilitation Phase.

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	<ul style="list-style-type: none"> <li>Unpaved roads, e.g. which may be utilized for construction vehicles movement or transportation of construction materials should be prepared in a way to avoid dust emissions. Watering to suppress dust should take place regularly.</li> <li>Watering or increase of the moisture level of the open materials storage piles to reduce dust levels.</li> <li>Enclosure or covering of inactive piles to reduce wind erosion.</li> <li>Loads in all trucks transporting dust-generating materials have to be sprayed with water to suppress dust, as well as wheels of means moving inside and outside of the construction-site.</li> <li>Speed reduction for vehicles approaching the site to less than 40 km/hr. On site, speed should not exceed 20 km/hr.</li> </ul>	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>Engines of vehicles and other machinery are kept turned on only if necessary, avoiding any unnecessary emission.</li> <li>Machines and equipment are periodically checked and maintained to ensure their good working condition.</li> <li>All equipment and machines must be maintained and tested for compliance with standards and technical regulations for the protection of the environment and have appropriate certifications.</li> <li>Activities are carried out using the minimum required number of means at the same time.</li> <li>Electric small-scale mechanization and technical tools are used when available and feasible.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
2	Noise	Construction activities are to take place within reasonable hours during the day and early evening. Night-time activities near noise sensitive areas, such as residential buildings, should not be allowed.	Contractor	Resident engineer	Included in contractor cost

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<ul style="list-style-type: none"> <li>Equipment must be kept in good working order and where appropriate fitted with silencers which are kept in good working order.</li> <li>Equipment to run only when necessary</li> <li>Positioning of the noise sources in a concealed area with respect to acoustic receptors, consistent with the needs of the construction site.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
		Use of personal protection equipment for workers especially those who use jack hammers or near noisy engines or compressors.	Contractor	Resident engineer	1000
3	Water resources	Wastewater from the worker rest areas or construction offices should be contained in solid containers and should be removed regularly from site by means of authorized contractors.	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>In case of using septic tanks on site, the engineering drawings of these tanks should be presented to the Resident Engineer for approval.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
4	Soil	<ul style="list-style-type: none"> <li>To prevent soil contamination by oil/grease spills, leakages or releases, all manipulations of oil derivatives in the process of construction and provision of the fuel to the machines should be performed with maximum care; leak proof containers should be used for storage and transportation of oil/grease and wash off from the oil/grease handling area shall be drained through drains and treated appropriately before disposal;</li> <li>Construction waste and debris shall be collected on a regular basis and disposed of at designated landfills;</li> <li>Only authorized quarries shall be used for purchasing soil to be used for embankment, padding, bedding, backfilling during construction; and</li> <li>It must be prohibited to operate equipment and vehicles outside the designated work areas and roads.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
		No hazardous waste storage to take place directly on soils. Appropriate and enclosed containers should be utilized.	Contractor	Resident engineer	1000
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>Minimize waste generation on site.</li> <li>Simple waste management plan for specific waste streams must be developed.</li> <li>General waste must be collected and transported to local council approved disposal</li> </ul>	Contractor	Resident engineer in coordination with the local	1000

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<p>sites.</p> <ul style="list-style-type: none"> <li>• Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors.</li> <li>• Waste containers must be located at each worksite.</li> <li>• Chemical wastes must be collected in 200 liter drums (or similar sealed container), appropriately labeled, for safe transport to an approved chemical waste depot or collection by a liquid waste treatment service.</li> <li>• Allocate and prepare areas for temporary storage of scrap.</li> <li>• Storage, transport and handling of all chemicals must be conducted in accordance with all legislative requirements, through licensed contractors and in coordination with the local authority.</li> <li>• All hazardous wastes must be appropriately stored in bounded areas and should be clearly identified as “hazardous”.</li> <li>• Transportation and disposal of hazardous wastes should be done through licensed contractors and in close coordination with the relevant local authority and in compliance with the legal requirements and instructions of the ministry of science and technology previously.</li> <li>• Hazardous liquids, such as solvents, rust proofing agents and primer must be managed in accordance with the requirements of relevant legislation and industry standards.</li> <li>• A hazardous materials inventory for the construction period must be prepared.</li> <li>• Material Safety Data Sheets (MSDS) for hazardous materials must be available on-site during construction and made available and explained to workers.</li> <li>• Hydrocarbon wastes, including lube oils, must be collected for safe transport off-site for reuse, recycling, transport or disposal at approved locations.</li> </ul>		authority and ministry of science and technology regarding hazardous wastes	
6	<b>Flora &amp; Fauna</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable
7	<b>Topography and landforms</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable



Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
8	Traffic	<ul style="list-style-type: none"> <li>Where practicable, truck deliveries must be restricted to daytime working hours.</li> <li>Clear traffic signs and signs signals must be installed on-site to provide for safe traffic.</li> <li>In case a narrow access road needs to be occupied for limited period (for example by loading/unloading trucks or loaders) the occupation time should be minimized.</li> <li>The contractors should make sure that the employed drivers of construction machinery (such as trucks and loaders) have received sensitization/training on safety utilization of their machines in order to minimize accidents risks.</li> </ul>	Contractor in coordination with the Local Traffic Department for some sections	Resident Engineer	500
9	Health and Safety	<ul style="list-style-type: none"> <li>Limit speed of construction vehicles and provide road signage for drivers and local community.</li> <li>Only allowing trained and certified workers to install, maintain, or repair electrical equipment.</li> </ul>	Contractor	Local traffic department in coordination with Resident engineer	1000
		<ul style="list-style-type: none"> <li>Qualified personnel must be employed for the construction equipment, and personnel must be trained for health and safety issues.</li> <li>The contractor shall prepare an OHS plan and emergency procedures.</li> <li>Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas), and education / public outreach to prevent public contact with potentially dangerous equipment;</li> <li>Grounding conducting objects (e.g. fences or other metallic structures) installed near power lines, to prevent shock.</li> <li>Personal protection equipment such as eyeglasses, gloves, hard heads and safety belts must be supplied and continuously used by all workers, technicians, engineers and site visitors.</li> </ul>	Contractor	Resident engineer	1500

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<ul style="list-style-type: none"> <li>compliance with international standards for good construction practices;</li> <li>adherence to local and international guidance and codes of practice on EHS management during construction;</li> <li>implementation of EHS procedures as a condition of contract with contractors and their sub-contractors;</li> <li>pre-construction assessment of the EHS risks and hazards associated with construction and operation, including consideration of local cultural attitudes, education level of workforce and local work practices;</li> <li>provision of appropriate training on EHS issues for all construction and operation workers, including initial induction and regular refresher training, taking into account local cultural issues;</li> <li>provision of health and safety information;</li> </ul>	Contractor	Resident engineer	Included in contractor cost
		<ul style="list-style-type: none"> <li>For working at height: Testing structures for integrity prior to undertaking work</li> <li>Installation of fixtures on tower components to facilitate the use of fall protection systems;</li> <li>Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures</li> <li>Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached;</li> </ul>	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>Any accidents to be reported and treated within site as a first aid procedure.</li> <li>Fuel and oil changing shelters should be equipped with necessary firefighting and safety equipment</li> <li>First aid items should be available all times onsite and trained staff on emergency aids should be identified.</li> </ul>	Contractor	Resident engineer in coordination with health & safety officials.	1000
10	<b>Handling Complaints</b>	<ul style="list-style-type: none"> <li>A complaints register will be kept on site and this will feed into the GRM. Details of complaints received will be incorporated into the audits as part of the monitoring process.</li> </ul>	Resident Engineer	PMT	Included in contractor cost

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
11	Social impacts	<ul style="list-style-type: none"> <li>Job opportunities should be primarily provided to the community people adjacent to the electrical grid lines.</li> <li>Community leaders should be represented in a Steering Committee. They should be informed about the job opportunities available for the community people.</li> <li>The community should voice their concerns through appropriate grievances and redress mechanism.</li> <li>It is strongly recommended that PMT should provide awareness rising among the community that the EMF impact is limited in case of respecting the ROW.</li> </ul>	Contractor	RE/PMT	Included in contractor cost
12	Child labor and Gender Based Violence	<ul style="list-style-type: none"> <li>Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exist in the subproject</li> <li>The PMT will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).</li> <li>Labor influx should also be managed by contractor and ensure Code of Conduct is introduced and applied to avoid impact on local community and provide mitigation measure for GBV risks</li> <li>The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance</li> <li>The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and gender based violence and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
<b>Total cost US\$ (rehabilitation phase)</b>					<b>10,000</b>

### Mitigation Measures during Operation Phase.

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated
1	• Air quality	• The net impact of the Project on air quality is not significant and temporary, and will be limited to Construction Period.	Not Applicable	Not Applicable	Not Applicable
2	• Noise	• Vibration or humming noise can be noticeable and is most often associated with older electrical grid lines. It is usually the result of conductor mounting hardware that has loosened slightly over the years and can be easily repaired by the local authority, especially near residential areas or other sensitive receptors such as schools and hospitals	Local authorities	Local authorities	No Cost
3	<b>Water resources</b>	Not applicable	Not applicable	Not applicable	Not applicable
4	<b>Soil</b>	Not applicable	Not applicable	Not applicable	Not applicable
5	<b>Solid &amp; hazardous wastes</b>	<ul style="list-style-type: none"> <li>• During the operational period, some littering and waste generation resulting from the repair activities might occur. Littering may occur due to wind action.</li> <li>• Providing adequate secondary containment for fuel storage tanks and for the temporary storage of other fluids such as lubricating oils and hydraulic fluids,</li> <li>• Using impervious surfaces for refueling areas and other fluid transfer areas</li> <li>• Carry out preventive maintenance to pole mounted transformers and conduct frequent monitoring to ensure no leaks has occurred.</li> </ul>	Local Authority (Municipality)	Local authority (Municipality)	Within municipal budget
6	<b>Flora &amp; Fauna</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable
7	<b>Topography and landforms</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable
8	<b>Handling Complains</b>	The continued operation of a GRM for one year following opening of the electrical grid lines for use will ensure that local community members have an accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.	Local authorities	Local authorities	No cost
9	<b>Health and Safety</b>	<ul style="list-style-type: none"> <li>• Only allowing trained and certified workers to install, maintain, or repair electrical equipment</li> <li>• Deactivating and properly grounding live power distribution lines before work is performed on, or in close proximity, to the lines</li> <li>• Ensuring that live-wire work is conducted by trained workers with strict adherence to specific safety and insulation standards. Qualified or trained employees working on</li> </ul>	Local authorities	Local authorities	No cost

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated
	<p>transmission or distribution systems should be able to achieve the following: 1- Distinguish live parts from other parts of the electrical system 2- Determine the voltage of live parts 3- Understand the minimum approach distances outlined for specific live line voltages 4- Ensure proper use of special safety equipment and procedures when working near or on exposed energized parts of an electrical system.</p> <ul style="list-style-type: none"> <li>• Workers should not approach an exposed energized or conductive part even if properly trained unless: 1- The worker is properly insulated from the energized part with gloves or other approved insulation; or, 2- The energized part is properly insulated from the worker and any other conductive object; or, 3- The worker is properly isolated and insulated from any other conductive object (live-line work).</li> <li>• Where maintenance and operation is required within minimum setback distances, specific training, safety measures, personal safety devices, and other precautions should be defined in a health and safety plan</li> <li>• Workers not directly associated with power transmission and distribution activities who are operating around power lines or power substations should adhere to local legislation, standards, and guidelines relating to minimum approach distances for excavations, tools, vehicles, pruning, and other activities;</li> <li>• Minimum hot stick distances may only be reduced provided that the distance remaining is greater than the distance between the energized part and a grounded surface.</li> <li>• Testing structures for integrity prior to undertaking work;</li> <li>• Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers, among others;</li> <li>• Establishment of criteria for use of 100 percent fall protection (typically when working over 2 meters above the working surface, but sometimes extended to 7 meters, depending on the activity). The fall protection system should be appropriate for the tower structure and necessary movements, including ascent, descent, and moving from point to point;</li> <li>• Installation of fixtures on tower components to facilitate the use of fall protection systems;</li> <li>• Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached;</li> <li>• Hoisting equipment should be properly rated and maintained and hoist operators</li> </ul>			

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated
	<p>properly trained;</p> <ul style="list-style-type: none"> <li>• Safety belts should be of not less than 16 millimeters (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibers become evident;</li> <li>• When operating power tools at height, workers should use a second (backup) safety strap;</li> <li>• Signs and other obstructions should be removed from poles or structures prior to undertaking work;</li> <li>• An approved tool bag should be used for raising or lowering tools or materials to workers on structures.</li> <li>• Identification of potential exposure levels in the workplace, including surveys of exposure levels in new projects and the use of personal monitors during working activities;</li> <li>• Training of workers in the identification of occupational EMF levels and hazards;</li> <li>• Establishment and identification of safety zones to differentiate between work areas with expected elevated EMF levels compared to those acceptable for public exposure, limiting access to properly trained workers;</li> <li>• Implementation of action plans to address potential or confirmed exposure levels that exceed reference occupational exposure levels developed by international organizations such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and the Institute of Electrical and Electronics Engineers (IEEE).</li> <li>• Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas), and education / public outreach to prevent public contact with potentially dangerous equipment;</li> <li>• Grounding conducting objects (e.g. fences or other metallic structures) installed near power lines, to prevent shock.</li> </ul>			
10	<p><b>Child labor and Gender Based Violence</b></p> <ul style="list-style-type: none"> <li>• Rigid obligations should be applied in order to warrantee no child labor exist in the subproject.</li> <li>• The Local authorities will be responsible to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).Labor influx should also be managed by contractor and ensure Code of Conduct is introduced and applied to avoid impact on local community and provide mitigation measure for GBV risks</li> <li>• The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and gender based violence and also training</li> </ul>	Local authorities	Local authorities	No Cost

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated
	and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities.			
<b>Total cost US\$ (Operation phase)</b>				<b>No Cost</b>

### Monitoring Activities during Rehabilitation Phase

Receptor	Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$	
1	<b>Air quality</b>	<ul style="list-style-type: none"> <li>Investigate dust complaints from workers and residents</li> <li>Visual inspection of vehicles and equipment operating or entering the site and Measurements of exhaust emissions (CO, SO<sub>x</sub>, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>)</li> </ul>	<ul style="list-style-type: none"> <li>Recorded and documented complaints</li> <li>Record the status of equipment and vehicles on site (excessive black or white smoke)</li> </ul>	<ul style="list-style-type: none"> <li>Daily visual inspection</li> <li>Once every six month</li> </ul>	Resident Engineer	PMT	1,000
2	<b>Noise</b>	Investigate noise complaints from workers and neighboring communities in the affected locations	<ul style="list-style-type: none"> <li>Recorded and documented complaints</li> <li>Recorded tests results</li> </ul>	<ul style="list-style-type: none"> <li>Weekly inspection of complaints</li> <li>Only in case of complains</li> </ul>	Resident Engineer	PMT	1,000
3	<b>Water resources</b>	<ul style="list-style-type: none"> <li>Investigate implementation of mitigation measures and observe any oil or fuel spills.</li> <li>Investigate wastewater disposal measures</li> </ul>	Site Investigation report	Daily Investigation	Resident Engineer	PMT	No cost
4	<b>Soil</b>	<ul style="list-style-type: none"> <li>Observe any soil contamination with oil or fuel</li> <li>Observe any accumulation of wastes</li> </ul>	Site Investigation report	Monthly	Resident Engineer	PMT	No cost

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>• Maintain records on waste types and quantities</li> <li>• Observe any waste accumulation in un approved locations</li> </ul>	<ul style="list-style-type: none"> <li>• Waste management contracts with authorized contractors</li> <li>• Waste delivery receipts from local authorities.</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> <li>• Weekly</li> </ul>	Resident Engineer	PMT	No cost
6	Health and safety	<ul style="list-style-type: none"> <li>• Ensure compliance of workers to Health and Safety requirements</li> <li>• Maintain log on accidents</li> </ul>	Observation report Accidents report	Weekly	Resident Engineer	PMT	No cost
7	Flora & Fauna	Record any observation about wild animals or plants on site or nearby and report to the Environmental Authority	Observation report	Upon occurrence	Resident Engineer	PMT	No cost
8	Topography and landforms	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
9	Traffic	Ensure speed limits and warning signs are installed	Road signs are installed.	Monthly	Resident Engineer	PMT	No cost
10	Handling Complaints	Ensure that the GRM is effective and well communicated	Number of complaints received, analyzed and responded to.	Weekly	Resident Engineer	PMT	No cost
11	Child labor and Gender Based Violence	<ul style="list-style-type: none"> <li>• Ensuring that children and minors are not employed directly or indirectly on the project.</li> <li>• Ensure to prevent misconducts, including prevention of sexual harassment and gender based violence.</li> </ul>	<ul style="list-style-type: none"> <li>• A copy of IDs of laborers and labor registry.</li> <li>• Percentage of workers that have attended the code of conduct training and number of GBV training delivered.</li> </ul>	<ul style="list-style-type: none"> <li>• Daily</li> <li>• Weekly</li> </ul>	Resident Engineer	PMT	No cost
<b>Total cost US\$ (Operation/Maintenance phase)</b>							<b>2,000</b>



## Monitoring Activities during Operation Phase

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
2	Noise	Investigate noise from vibration or humming noise in the affected locations	<ul style="list-style-type: none"> <li>• Recorded and documented complaints</li> <li>• Recorded tests results</li> </ul>	Only in case of complains	Local authorities	Local authorities	No cost
3	Water resources	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
4	Soil	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>• Maintain records on waste types and quantities</li> <li>• Observe any waste accumulation in un approved locations</li> </ul>	<ul style="list-style-type: none"> <li>• Waste management contracts with authorized contractors</li> <li>• Waste delivery receipts from local authorities.</li> </ul>	Weekly	Local authorities	Local authorities	No cost
6	Health and safety	<ul style="list-style-type: none"> <li>• Ensure compliance of workers to Health and Safety requirements</li> <li>• Maintain log on accidents</li> </ul>	Observation report Accidents report	Weekly	Local authorities	Local authorities	No cost
7	Flora & Fauna	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
8	Topography and landforms	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
10	Handling Complaints	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
11	<b>Child labor and Gender Based Violence</b>	<ul style="list-style-type: none"> <li>• Ensuring that children and minors are not employed directly or indirectly on the project.</li> <li>• Ensure to prevent misconducts, including prevention of sexual harassment and gender based violence.</li> </ul>	<ul style="list-style-type: none"> <li>• A copy of IDs of laborers and labor registry.</li> <li>• Percentage of workers that have attended the code of conduct training and number of GBV training delivered.</li> </ul>	Weekly	Resident Engineer	PMT	No cost
<b>Total cost US\$ (Operation phase)</b>							<b>No cost</b>

## **PUBLIC CONSULTATION RESULTS**

According to the WB policies, it is required that broad and open public consultations be held with PAPs on the project. These consultations are to ensure that the PAPs are provided with the opportunity to engage in the rehabilitation planning process, to raise questions and receive input and responses to their concerns.

### **Consultation Process:**

In order to fulfill the WB requirements, public consultation and also one on one interview were carried out to obtain sound information on the possible impacts on the local communities. Accordingly, a questionnaire was formatted to cover the key environmental and social aspects related to the subprojects. It was difficult to conduct the public consultation with the women due to the tribe's habits that exist in the area of the project. However, individual interviews with women were conducted to take the women's opinions freely. The questionnaire was then addressed to ten women of the local individuals in the surrounding community randomly to have their opinions and thoughts regarding the construction activities.

### **Consultation Results:**

The public consultations were carried out in the three villages for rehabilitation of the Electricity grid during period of Oct 1-2, 2019. The public consultations included only men and number of participants were 15, 10 and 11 in village 1, 2 and 3 respectively. The registered results out of the consultations that the rehabilitation of the electricity grid is a priority of all villages due to weak power supply of the current grid which does not accommodate home appliances and the operation of the agriculture pumps.

Additionally, the participants from the three villages agreed that, the rehabilitation activities will have a positive impact on their social daily life. Please refer to annex 3 for more details. As per the questionnaire prepared for individual interview, the below are the main findings.

1. All questioned locals agreed that the rehabilitation activities will have a strong positive impact from the social perspectives on the locals.
2. No claims from any locals were recorded or alleged regarding the ownership of the land where the electrical grid lines are constructed; all agreed that is governmental land property.
3. No vegetation covers, crops, plants, trees...etc. will be removed in order to execute the rehabilitation activities of the electrical grid lines.
4. The interests of the locals will not be affected in any way by the rehabilitation activities.
5. No infrastructure within the electrical grid lines area will be affected negatively due to the reconstruction activities.
6. No deportation, dislocation of any of the local community will be needed due to these activities.
7. The rehabilitation of the project will enhance the social relationship among the locals; improve their achievements and performance via the availability of electricity.

8. All locals agreed that the project (s) will need more instructional signs near the electrical grid lines area.

During public consultation, information about GRM was introduced to local people and they were informed that they can submit their complaint to either site engineer, or to community leader or to PMT during rehabilitation. The community leaders' information and PMT contact information will be available before implementation starts.

## GRIEVANCE REDRESS MECHANISM

The proposed GRM for the SFDP aims to resolve issues that could come across implementation promptly, more efficiently, and accurately. The design of the GRM system should provide means for collecting supportive documents and evidences, investigating the problem, and supporting the final decision. An effective GRM is characterized by: diversity, clear procedures, swift responses, and allowing for two-way communication.

Complainants would commonly approach this GRM for many reasons, including those related to incomplete or no service, vague procedures, inappropriate/ unfair treatment by the staff, and harm (environmental and/or social) to individuals or groups as a result of carrying out the Project's interventions.

The complaint/ grievance, once received, should be promptly resolved or undergone further investigation. Complaints are sorted out according to complexity. Direct responses should be given to simple inquiries by concerned staff members in 3-6 working days as a maximum, and should be documented and archived as per the relevant procedure. While, more comprehensive measures should be applied to complex issues, including field investigation and communicating with higher management for final decisions within a timeframe of 20 working days as a maximum. After the completion of the proceedings, the complaint is closed, and information is included in the system, including the action(s) taken and the result(s) required. The complainant shall be notified of the result and the action immediately and informed of the possibility of objecting to the procedure. See detailed procedures in the main ESMF report.

In addition to PMO, the MOP, project offices in governorates, and Community Development Groups (CDGs), the World Bank's Grievance Redress can also be approached for reporting and resolving issues.

In any case, the PMT must maintain records of grievances and complaints, including minutes of discussions, recommendations and resolutions made. Participants were informed that they can submit their complaint to either site engineer, or to community leader or to PMT during construction. The PMT contact information (office and mobile phone numbers) will be available before implementation starts and will be posted at the entrance of the project site

### Contact Information for GRM

#	Name	Job Title	Phone Number	E-mail
1	Ahmed Ibrahim	clerk	07701830500	<a href="mailto:Basmamohammed337@yahoo.com">Basmamohammed337@yahoo.com</a>
2	Hussam Shaael	Translator	07827793093	<a href="mailto:hussamshail@yahoo.com">hussamshail@yahoo.com</a>
3	Ibtisam Jasim	Deputy head	07724674469	<a href="mailto:Sfd.iraq.2018@gmail.com">Sfd.iraq.2018@gmail.com</a>

# **Main Report**

## 1. INTRODUCTION

With the recent liberation of Mosul from ISIS, Iraq faces a historic opportunity for national reconciliation through the effective delivery of critical social services, economic growth and recovery programs. The reinstatement of trust between the State and its citizens is highly dependent on the Government of Iraq (GOI) demonstrating its capacity to deliver security, jobs and economic growth to all Iraqis, with a focus on the poor, the vulnerable and the millions of Internally Displaced People (IDP). The GOI has embarked on a comprehensive reform of social protection programs. Two major achievements were the shift from categorical to poverty targeting in social assistance that improved outreach to the poor; and the issuance of the new integrated Social Insurance Law that is likely to have a positive impact on labor mobility and fiscal rationalization of the pension's fund.

Complementing this work, the GOI, represented by the Ministry of Planning (MOP), requested the World Bank's support in the design and financing of a Social Fund for Development (SFD) project to support locally driven initiatives to improve the living conditions and opportunities of the poor and most vulnerable in Iraq.

The GOI has demonstrated its commitment and support to the design of this operation and established a high-level national team to guide and coordinate the development and institutionalization of the SFD, as well as five technical teams to work on the different aspects of the fund. These teams developed the design of the SFD, and the draft SFD law. The SFD would thus be established by law, as an autonomous institution that does not operate under civil service regulations. While SFD law is being formulated and issued, the Ministry of Planning (MOP), at the central and local levels, specifically by the Directorate General of Poverty Reduction Strategy, will initiate SFD activities in three governorates in the first year, then expand to another four in the second year, and ultimately scale-up to the rest of the country starting in year three of project implementation.

The Project Development Objectives (PDOs) are to: (1) Improve access to basic services and; (2) Increase short-term employment opportunities, in targeted communities.

According to the Environmental and Social Management Framework (ESMF) which was prepared for the Social Fund for Development project (SFDP) and disclosed locally and on the WB website, an Environmental and Social Management Plan (ESMP) should be prepared, cleared and publically consulted

upon and disclosed prior to the commencement of any construction activities for these grid lines component.

This ESMP was developed to cover the activities associated with the rehabilitation and operation of **Electrical grid lines in three villages within Salah Al-Din governorate**. The ESMP identifies key environmental and social impacts of the project activities during both the rehabilitation and the operational phases, and defines the necessary mitigation measures addressing potential negative impacts, as well as monitoring procedures during construction and operation. The ESMP was carried out by an independent consultant according to requirements of the current environmental regulations of the World Bank (OP 4.01), and Iraqi regulations. In this report the WB, and Iraqi environmental and social standards and regulations were followed to ensure the national and international acceptance and compliances of the ESMP. The ESMP should be followed and implemented by all relevant parties.

The objectives of this ESMP are to provide:

- Practical and achievable actions to ensure that the project's adverse environmental and social impacts are properly mitigated.
- Support to Local and State authorities to enable setting approval conditions for the project based on relevant standards and procedures.
- An integrated plan for monitoring, assessing and controlling potential impacts.
- An opportunity for holding consultation with the communities to get their input on the project activities.
- Focus on positive aspects and benefits, mitigate negative impacts and avoid serious and irreversible damage to the environment and people.
- Information to the local community about the revised project activities and the environmental measures, socio-economic measures, information on residents' rights who might be negatively affected by some project activities and electrical grid lines operations.
- Information to the local community of the existence of a Grievance Redress Mechanism (GRM) system through which they might lodge complaints and expect prompt and fair consideration.

The ESMP establishes a framework for the identification of environmental protection, mitigation, monitoring measures to be taken during rehabilitation and operational phases of the project. The ESMP includes project description, mitigation measures, monitoring plan, management plan, institutional arrangements, and public consultation. The ESMP will aim to achieve a good



environmental and social performance during construction and maintenance. To meet this goal, the following activities, measures and programs must be followed:

- Environmental regulations
- Application of all environmental and social mitigation and management measures.
- Application of Environmental and social monitoring plan.
- Preparation of emergency and contingency plan.
- Application of Institutional plan.
- Application of Environmental and safety measures.
- Effective and open consultations with local communities.

Environmental and social monitoring is an important component of this ESMP. It provides the information for periodic review and refinement modification of the ESMP as necessary, ensuring that environmental and social protection is optimized in all project phases through monitoring and early detection and effective remediation of unwanted environmental and social impacts. Finally, it will also demonstrate compliance with national and international regulatory requirements.

## 2. PROJECT DESCRIPTION

The subprojects are located in the Governorate of Salah Al-din northeast of Baghdad. Tikrit is the administrative center of Salah Al-Din Governorate and its located 140 kilometers (87 mi) northwest of Baghdad and 220 kilometers (140 mi) southeast of Mosul on the Tigris River. Al Bodelf, Al Botemah, and Al Ahbab are villages within Salah Al-Din governorate which are located about 39km, 82km, and 119km from Tikrit respectively. Most of these electrical grid lines were damaged and destroyed when ISIS occupied these areas as shown in Annex (5). The proposed activities in this subproject will involve the supply and installation of oil type poles, overhead cables, circuit breakers and transformers in three villages as shown the table below. These villages are provided with power via connection to existing sub-transmission line which is connected to transmission substation. The grid lines that required to be rehabilitated are within the area in the figure below and are the following:

- **Installing oil type pole-mounted distribution transformers, cables, circuit breakers, and light post as follows:**

Village	Transformers	Circuit Breakers	Cables (m)	Light Post
Al Bodelf	7	14	4800 + 3600	44
Al Botemah	4	8	3200 + 3600	26
Al Ahbab	6	12	8400 + 4800	42

The construction is expected to take place by carrying the poles materials by lorry and assembling the poles on site. Work is expected to take place at several construction locations at the same time. The construction teams at each location would consist of 2-3 crews of 5-10 people, working one after another, Construction works of the electrical grid distribution network in these villages in Salah Al-Din Governorate which is connecting to the residential homes will include the following activities:

1. Providing workers and all the surveying equipment required for the execution of poles works.
2. Conduct excavation work according to the dimensions and methodologies mentioned in the drawings
3. Erection of Poles and casting the foundations of these poles with concrete.
4. Connect all accessories of the poles, stringing with jointing sagging and tensioning of conductors.
5. Installing of Distribution Transformers accessories.

## 2.1 Objective of the Maintenance Works

The objective of the project is to rehabilitate the above-mentioned electrical grid lines. The project aims at facilitating the following:

- Link the electricity to people's houses after the war with ISIS.
- Improve the electricity distribution networks.
- Increase the flexibility of providing electricity and therefore providing electricity to schools and other industrial and commercial activities.
- Mitigating the effects of war and ensure a safe return for the displaced people when return to their land.

The rehabilitation works will imply the construction of camps in the areas adjacent to the grid lines. The construction camp will be established near these grid lines on vacant state owned lands for storage of equipment and construction materials. The construction will need about 20-25 local workers per day per subproject. These workers will need to have their accommodation (if there is non local worker) facilities in these camps, during the construction phase. No additional land acquisition is needed.



**Figure 4: Electrical grid lines within Al Bodelf , Al Botemah, and Al Ahbab villages**

## **2.2 Scope of Work**

Works for Rehabilitation of the grid lines on Salah Al-din Governorate will include removing the old and damaged cables and all other fittings and move them in the store that belongs to the ministry of electricity. Then the work will include installing distribution transformers, cables, and light post.

The work will also comprise of some civil work such as shallow excavation for light posts, lifting the soils and other waste produced during the excavation, and also casting in order to prepare the foundations for the light post.

The anticipated duration of construction works is about 6 months with about 20-25 workers per day per subproject and most of them are local workers and the rest are engineers and technicians. The construction is expected to take place by carrying the tower materials to each tower base by lorry and assembling the towers on site. Work is expected to take place at several construction locations at the same time. The construction teams at each location would consist of crews, working one after another, with each crew responsible for one of the following: preparing the foundations for the towers, erecting of the towers and installing the wires and its accessories.

The work will also comprise of some civil work such as excavation, lifting the soils and other waste produced during the excavation, and also casting for the towers.

## **2.3 Design Data**

Most of these electrical grid lines were designed, constructed and installed in the early of 1980s.

### 3. BASELINE CONDITIONS

#### 3.1 The Project Area

Tikrit city and its suburban area have a long historic background of several years as part of the Mesopotamia civilization. The principle agricultural activity in the area is different crops. Farming, some industrial activities are the major economic activity in Tikrit. The project is located in the governorate of Salah Al-Din that is sited in mid-north of Iraq, sharing internal boundaries with the governorates of Baghdad, Dyala, Kirkuk, Musel, Erbil, sulaymaniyah and Ramadi.

The Tigris River crosses the governorate. Irrigated farmland stretches along these rivers. Agriculture has traditionally been one of the main economic activities in Salah Al-Din, the main productions are corn, wheat, and barley.

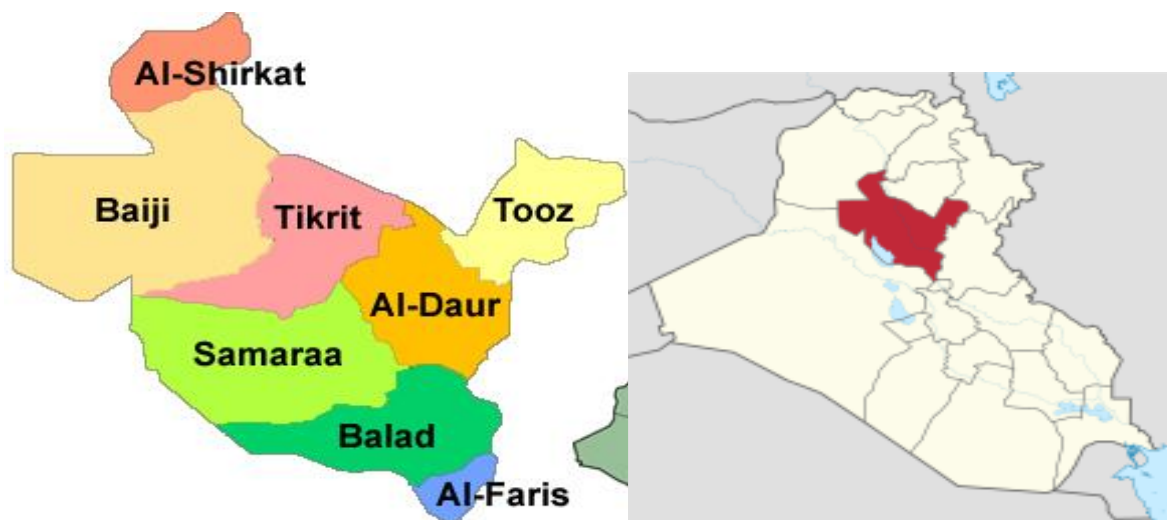




Figure 5: Google Earth Image showing the Working area under study

### 3.2 Environmental and Social Baseline Conditions

The environmental baseline section is presented to give clear overview of the environmental and social conditions in the vicinity of the subproject location prior to commencement of works. The elements of the environment include: climate and meteorology, air quality, topography, noise levels, traffic, rivers and waterways, biodiversity including flora, fauna, rare or endangered species, and sensitive habitats. It also includes consideration of socio-economic characteristics. The following sections present such information.

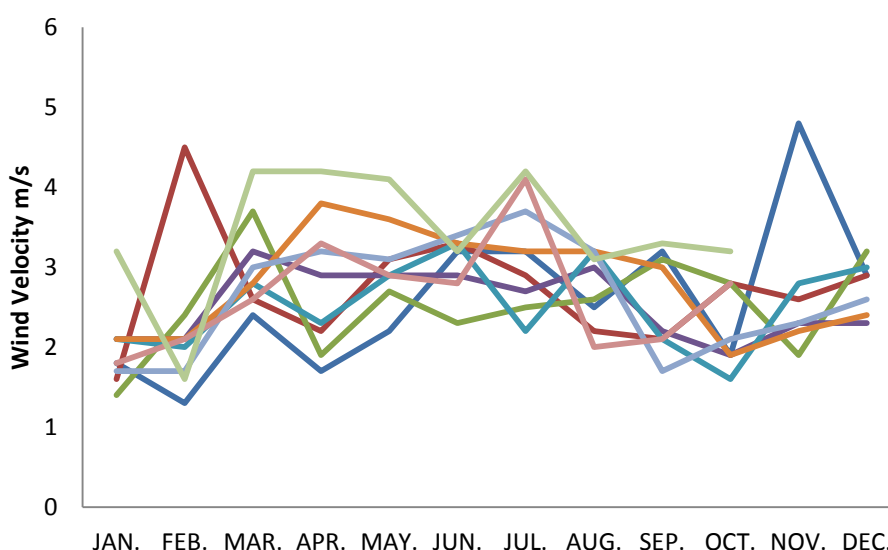
#### 3.2.1 Climate

Salah Al-Din governorate is located in the northern mid part of Iraq, and has a semi- desertic climate. The climate in the project area is called a semi desert climate. The major rain falls from November thru February, with a spread showering in March. During the year, about 177 mm of precipitation falls annually, while the average annual temperature is 29.7 °C. The driest weather is in June, July & August, September when no rainfall (precipitation) occurs. While, the wettest weather is in February & March when rainfall (precipitation) occurs. Monthly wind velocity record in recent years is shown in the following table.

**Table 3-1: Monthly Mean Wind Speed**

Observation station: Salah Al-Din station Monthly mean wind velocity (m/sec)

YEAR	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
2004	1.8	1.3	2.4	1.7	2.2	3.2	3.2	2.5	3.2	1.9	4.8	2.9
2005	1.6	4.5	2.6	2.2	3.1	3.3	2.9	2.2	2.1	2.8	2.6	2.9
2006	1.4	2.4	3.7	1.9	2.7	2.3	2.5	2.6	3.1	2.8	1.9	32.0
2007	2.1	2.1	3.2	2.9	2.9	2.9	2.7	3.0	2.2	1.9	2.3	2.3
2008	2.1	2.0	2.8	2.3	2.9	3.3	2.2	3.2	2.1	1.6	2.8	3.0
2009	2.1	2.1	2.8	3.8	3.6	3.3	3.2	3.2	3.0	1.9	2.2	2.4
2010	1.7	1.7	3.0	3.2	3.1	3.4	3.7	3.2	1.7	2.1	2.3	2.6
2011	1.8	2.1	2.6	3.3	2.9	2.8	4.1	2.0	2.1	2.8	—	—
2012	3.2	1.6	4.2	4.2	4.1	3.2	4.2	3.1	3.3	3.2	—	—



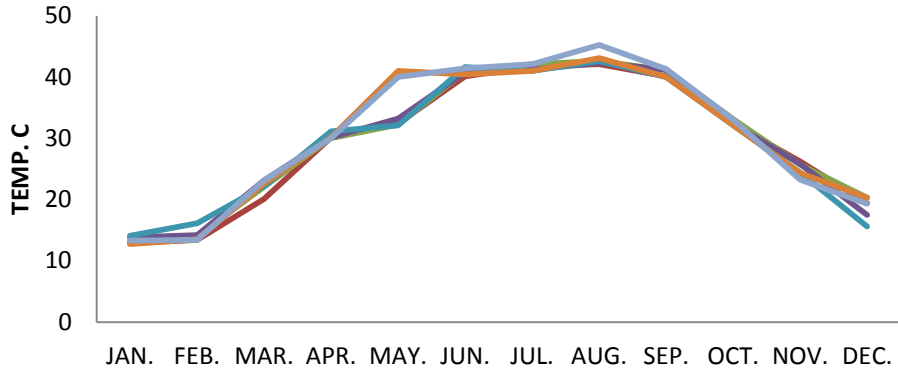
**Figure 6 Monthly Wind Velocity (m/s) from 2004-2012**

Highest temperatures occur in July and August and reach over 45 degrees centigrade... while the average annual temperature is 29.7 °C

**Table 3-2: Monthly Mean Temperature**

Observation station: Salah Al-Din station monthly means Temperature (°C)

YEAR	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
2007	12.9	13.4	20.1	30.1	32.4	40.1	41.7	42.1	40.1	32.3	26.2	19.4
2008	13.2	14.1	22.1	30.0	32.2	40.9	42.1	42.6	41.1	33.1	25.7	20.3
2009	13.8	14.2	23.1	30.1	33.2	40.8	41.2	42.3	41.2	32.3	25.8	17.5
2010	14.1	16.1	22.2	31.1	32.1	41.6	41.0	42.6	40.0	32.1	24.4	15.6
2011	12.7	13.5	22.6	30.1	41.0	40.4	41.0	43.1	40.0	32.1	24.3	20.3
2012	13.3	13.4	23.1	30.0	40.0	41.4	42.1	45.2	41.3	33.0	23.2	19.3



**Figure 7 : Monthly Mean Temperature C° from 2007-2012**

### 3.2.2 Air Quality

Concentrations of ambient pollutants vary according to both time and location. They are affected by many factors, the most significant being the size, number and location of emission sources and the prevailing weather. As electrical grids lines are located in an open area, so the expected concentration of these pollutants will be low. Furthermore, the electrical grids lines are in open area good ventilation and dispersion of any air pollutants will be expected. The ambient air quality is within the normal range, table (3) shows WHO Ambient Air Quality Guidelines.

**Table 3-3: WHO Ambient Air Quality Guidelines (EHS World Bank guidelines)**

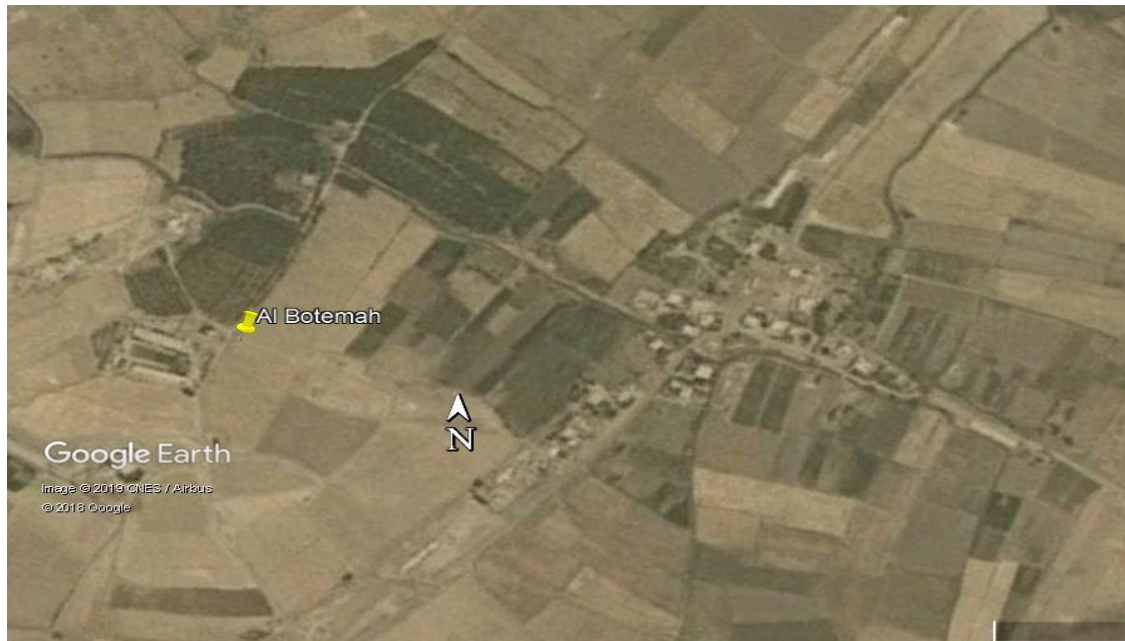
	Averaging Period	Guideline value in mg/m3
Sulfur dioxide (SO <sub>2</sub> )	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO <sub>2</sub> )	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM 10	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	4-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter PM 2.5	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline) 5 (Interim target-1)
	24-hour	50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)



### 3.2.3 Site Topography and location

The project sites area represents an extension of the flat areas that starting from the middle of Iraq till the mid-southern parts of the country. No natural land obstacles are presented in the project area. The project area is free of mountains, cliffs, and valleys.

The area adjacent to the subproject's site is characterized as rural residential and agricultural in Al ahabab village while tend to be desert in Al botemah and Al bodelf villages. The predominant agriculture in the area is the irrigated fruit plantations with limited vegetable cultivation. There are no protected areas or endangered species (there is no critical or high biodiversity values that might be affected) in the vicinity of the sites. There are no sensitive receptors located to the subprojects site except the Tigris River which is located along with Al ahabab Village for a distance of about 100m.



**Figure 8:** Google Earth Image showing the Working area in Al Botemah Village



**Figure 9:** Google Earth Image showing the Working area in Al Bodelf Village



**Figure 10:** Google Earth Image showing the Working area in Al Ahbab Village

### 3.2.4 Land use

The rehabilitation activities of electrical grid lines will be within the existing footprints of the lines that were built on state-owned lands.

### 3.2.5 Seismic Activities

The territory of Iraq, although not directly located on a dense cluster of recent earthquake epicenters; is subject to some seismic activities especially the east of Iraq. Some of those were recorded in the past as a result of movement of some tectonic plates in neighboring country, Iran. However, their impacts were insignificant to human and infrastructures.

### 3.2.6 Flooding

Sometimes, during spring season, there are some canals works as a drain channel (with a low water flow). There are no records of flooding that occurred previously in the area of these subprojects.

### 3.2.7 Noise

Currently, there is no traffic congestion and consequently the existed noise level is within the normal levels.

### 3.2.8 Heritage Environment

There are no sites of historical or cultural importance in the area. There are no cemeteries, historical-cultural monuments, churches, mosques near these subproject in the three villages that need to be removed in order to rehabilitate the electrical grid lines.

### 3.2.9 Traffic Level

No traffic problem or traffic congestion will be expected during the rehabilitation phase or in the operation phase.

### 3.2.10 Land Acquisition

The rehabilitation activities of electrical grid lines will be within the existing footprints of the lines that were built on state-owned lands.

The construction camp will be established near these lines on vacant state owned lands for storage of equipment and construction materials. The construction will need about 20-25 local workers per day. These workers will need to have their accommodation facilities in these camps, during the construction phase.

### 3.2.11 Social Aspects

Iraq is one of the most youthful countries in the world- nearly 50% of the population is less than 19 years old. Nearly 19% of the population has engaged in a form of social or political activity while about 35% of households believe that electricity should be the top priority for improvement. There is about 44% of Iraqis

are in the labor force (72%of males are in the labor force and just 13% of females). The principle agricultural activity in the area is different crops. Farming, some industrial activities are the major economic activity in Tikrit. Although there are some tribes near the area of the project, but not residential complexes or community structures in close proximity to the electrical grid lines. The electrical grid lines are being constructed on state land. All the areas apart from the acquisition area are ready for rehabilitation works, the local community which is eager for the works to be completed. It is also anticipated to have important positive social impacts on the local communities via providing the local workers, using and renting machines and trucks, in addition to the activation the mini markets and restaurants which will enhance the social level.

## 4. LEGAL ASPECTS

### 4.1 Iraqi environmental legislations

During rehabilitation and operation phases of the project, the work must follow the Iraqi laws and regulations for the environmental standards. These are:

1. Laws of the environment protection No.3 issued in 1997 and its relevant published regulations. No environmental regulations for gaseous emissions, noise and other air pollution standards are in force and legally binding. However, limits for water disposal in any surface waters and main sewers are regulated according to the regulations no. (25)/1967 and their update modifications released from the Ministry of Health (MOH) and the Ministry of Environment.
2. New environmental framework Law No. 27 of 2009 by the Iraqi National Government was introduced but the executive decrees remain to be prepared. There are as yet no formally adopted requirements for environmental assessment.
3. Regulations governing contact with archaeological sites extend also to encompass developmental activities like road construction and rehabilitation wherever these developmental activities lie within archaeological vicinity.
4. Regulations of the MOE on sanitary waste must be followed, and for the rubbles (construction & demolition waste) the regulations, legislations and instruction of both MOHE and MOCHPM.

Presents Iraqi's laws applicable to such activity.

**Table 4-1: Applicable Laws and Regulations in Iraq**

Law	Subject
Law no. 37 of 2008 for Ministry of Environment	Describes institutional arrangements of the Ministry of Environment and Outlines policies and roles and responsibilities toward protecting the environment.
Law no. 27 of 2009	Protection and Improvement of Environment Environmental protection from pollution resulted from petrol and natural gas extraction
Regulations no. 2 of 2001	Preserving water resources.
Law no. (55) Issued in 2002	Law of heritage and antiques
Law No. 37 of 2015.	Labor Law No. 37 of 2015.

For legal aspects, the work during construction and operation must follow the Iraqi laws and regulations for the Environmental Standards. These are laws of the environment protection No.3 issued in 1997 and the published regulations. No environmental regulations for gaseous emissions, noise and other air pollution

standards are in force and legally binding. However, limits for water disposal in any surface waters and main sewers are regulated according to the regulations no. (25)/1967 and their update modifications released from the ministry of health and the ministry of the environment. Law of heritage and antiques no. (55) Issued in 2002, while for a sanitary waste (municipal) the regulations of the MOE must be followed, and for the rubbles (construction & demolition waste) the regulations, legislations and instruction of both MOHE and MOCHPM must be followed. It is important also to mention that, the contractor will sign employment agreement with all construction workers by following labor law of Iraq.

It should be noted that legislation relating to social safeguards issued in Iraq since 2003 has focused primarily on the ratification of international conventions and protocols on issues such as cultural heritage. As yet there are no formally adopted requirements for social assessments relating to road works. Hence, social safeguards issues remain very largely uncovered except to the extent they are referred to under environmental laws.

## **4.2 The World Bank Safeguards Policies**

In addition to the Iraqi laws and regulation the ESMP follows key policies and procedures of the World Bank; the following section presents the WB operational policies relevant to the rehabilitation and reconstruction of the schools.

### **4.2.1 OP/BP 4.01 - environmental assessment procedure.**

The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making. The objectives of the EA are to:

- a. Ensure that projects proposed for Bank financing are environmentally and socially sound and sustainable.
- b. Inform decision makers of the nature of environmental and social risks.
- c. Increase transparency and participation of stakeholders in the decision-making process.

### **4.2.2 OP/BP4.12 the key Operational Policy**

OP/BP 4.12 describes the involuntary resettlement and focuses on the following principles:

- a) Involuntary resettlement is avoided wherever feasible, or minimized, exploring all viable alternative project designs;
- b) Where it is not feasible to avoid involuntary resettlement, activities are conceived and executed as sustainable development programs. Displaced persons are to be meaningfully consulted and have opportunities to participate in the planning and implementing of resettlement programs affecting them; and displaced persons are assisted in their efforts to improve their livelihoods and standards of living, or at

least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher. The mechanism of assisting displaced persons is based on full and prior mitigation and compensation for loss of assets or livelihoods.

- c) OP 4.12 applies whenever, in a Bank-financed project, land is acquired involuntarily, or access is restricted in legally designated parks or protected areas.

However, in this specific sub-project, OP 4.12 does not apply as all repair and rehabilitation activities will be within the existing footprint and no additional land acquisition is needed either permanently or temporarily.

#### **4.2.3 OP/BP 4.11 Physical Cultural Resources**

Physical cultural resources are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Their cultural interest may be at the local, provincial or national level, or within the international community. Physical cultural resources are important as sources of valuable scientific and historical information, as assets for economic and social development, and as integral parts of a community's cultural identity and practices. The Bank assists countries to avoid or mitigate adverse impacts on physical cultural resources from development projects that it finances. The impacts on physical cultural resources resulting from project activities, including mitigating measures, should not contravene either the borrower's national legislation, or its obligations under relevant international environmental treaties and agreements. The borrower addresses impact on the physical cultural resources in projects proposed for Bank financing, as an integral part of the environmental assessment process.

Iraq is rich in Physical/ Cultural Resources, and the destruction experienced during the conflict is likely to have affected historical buildings, religious sites such as mosques, and shrines, and monuments. The OP 4.11 is triggered as a precautionary measure since the subprojects' activities will include shallow excavations during construction phase.

### **4.3 WBG EHS: The Environmental, Health, and Safety (EHS) Guidelines**

These are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). When one or more members of the WB Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards.

## 5. IMPACT ASSESSMENT AND MITIGATION MEASURES

### 5.1 Construction Phase

This section of the report describes the environmental and social impacts that are likely to result from the construction and rehabilitation of this electrical grid lines, and the mitigation measures addressing them. The Environmental actions, procedures and responsibilities as required during the construction phase must comply with the available specifications, legislation, laws issued by the MOHE.

The construction contractor(s) will be responsible for compliance with the ESMP provisions during the construction phase of the subprojects. The contractor will be also in charge of undertaking construction works in a manner which complies with all relevant environmental procedures, adheres to all legislative requirements, and ensures that all environmental objectives associated with the contract are achieved. The overall assessment of the key environmental and social impacts is summarized below. According to the above environmental baseline and mitigation measures, it can be expected that the significant impact is low for most of the environmental receptors due to the minimum concentrations (as a background) for some parameters while health and safety has a high impact due to the fact this issue is related directly with the health and safety for the workers and staff. The impacts potentially may result from rehabilitation activities of electrical grid lines are shown in the table below:

**Table 5-1: Summary of Impact Assessment during Construction**

	<b>Impact</b>	<b>Impact Significance</b>
1	Air Quality	Medium
2	Noise	Medium
3	Water Resources	Low
4	Soil	Low
5	Solid and hazardous wastes	Low
6	Flora & Fauna	Not significant
7	Topography and landforms	Not significant
8	Impacts on local traffic	Low
9	Health and Safety	High
10	Socio-Economic impacts	Medium
11	Child labor	Medium
12	Labor influx	Low
13	Creation of Job opportunities	High

### 5.2 Operational Phase

During the operational period, the subprojects are expected to result a positive socio-economic outcome for the local communities. Socially harmful consequences of these electrical grids are not anticipated. However, the continued operation of a GRM for one year following opening of these grids will ensure that local community members have an



accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.

During operation of the electrical grid lines, hazardous wastes might be generated during routine operations (e.g., used oils, hydraulic fluids, coolants, solvents, and cleaning agents) and in the same time the risk of soil contamination is minimal. Therefore, minor negative impact may be resulted due to these wastes. These wastes are typically should be placed in containers, characterized and labeled, possibly stored briefly, and transported by a licensed contractor to an appropriate permitted off-site disposal facility as a standard practice to minimize the impact. It's also, Scrap fittings, insulators; cross arms, conductors, and other scrap which are expected, however it is expected that the amount of generated hazardous waste will not be significant. In terms of Noise from grid lines which is usually not clearly audible to a person on the ground below; however, noise may be emanated due to corona effects. Corona associates with operating grid lines under certain weather conditions, rainy and foggy weather, which does not normally occur within the project area. For the health and safety impact, There are major safety risks associated with the operation of electrical distribution grid lines: 1) electric shock risks, and 2) the probability to fall down the pole, however, the normal safety precautions that are followed in the design and construction of electrical grid lines, transformers, etc. are generally minimizing such risks both to the general public and to the maintenance workers.

## 6. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

In this section, the identified mitigation measures will be summarized. The responsibility for implementation of the mitigation measures will be mostly upon the contractor. However, the supervision and assurance that the mitigation measures are implemented will be the responsibility of the Resident Engineer who represents the ministry as the Project Owner.

The Resident Engineer (RE) will be assisted by a team of environmental and social officers who will be responsible for supervising the daily activities of the contractor and will report non-compliances to the Resident Engineer in order to take necessary actions towards the contractor in addition to the OHS aspects. Regular supervision site visits will also be conducted by the PMT environmental/social officer in association with a qualified environmental and social consultant who will provide technical advice in case there is a need to modify or add new mitigation measures as work necessitates.

The costs of mitigation measures are estimated based on the average market rates for similar activities in Iraq and can be used as indicative costs. It is the sole responsibility of the contractor to estimate the costs associated with the recommended mitigation measures based on his work experience.

In terms of hazardous waste, the following mitigation should be followed:

- Provide adequate sanitation facilities serving all workers (mentioned in HSE).
- Paints with toxic ingredients or solvents or lead-based paints will not be used
- All waste should be deposited through licensed haulers/transporters to licensed and regulated landfill sites appropriate to the type of waste generated (e.g. solid, household, hazardous).

The following tables and Annex (4) summarize the mitigation measures which are required to be undertaken to avoid any negative impacts on the environment. Responsibilities and estimated costs are also presented.

**Table 6-1: Environmental Management Plan (ESMP) during Construction Phase of electrical distribution grid lines**

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	<ul style="list-style-type: none"> <li>• Unpaved roads, e.g. which may be utilized for construction vehicles movement or transportation of construction materials should be prepared in a way to avoid dust emissions. Watering to suppress dust should take place regularly.</li> <li>• Watering or increase of the moisture level of the open materials storage piles to reduce dust levels.</li> <li>• Enclosure or covering of inactive piles to reduce wind erosion.</li> <li>• Loads in all trucks transporting dust-generating materials have to be sprayed with water to suppress dust, as well as wheels of means moving inside and outside of the construction-site.</li> <li>• Speed reduction for vehicles approaching the site to less than 40 km/hr. On site, speed should not exceed 20 km/hr.</li> </ul>	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>• Engines of vehicles and other machinery are kept turned on only if necessary, avoiding any unnecessary emission.</li> <li>• Machines and equipment are periodically checked and maintained to ensure their good working condition.</li> <li>• All equipment and machines must be maintained and tested for compliance with standards and technical regulations for the protection of the environment and have appropriate certifications.</li> <li>• Activities are carried out using the minimum required number of means at the same time.</li> <li>• Electric small-scale mechanization and technical tools are used when available and feasible.</li> </ul>	Contractor	Resident engineer	Included in contractor cost

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
2	Noise	Construction activities are to take place within reasonable hours during the day and early evening. Night-time activities near noise sensitive areas, such as residential buildings, should not be allowed.	Contractor	Resident engineer	Included in contractor cost
		<ul style="list-style-type: none"> <li>Equipment must be kept in good working order and where appropriate fitted with silencers which are kept in good working order.</li> <li>Equipment to run only when necessary</li> <li>Positioning of the noise sources in a concealed area with respect to acoustic receptors, consistent with the needs of the construction site.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
		Use of personal protection equipment for workers especially those who use jack hammers or near noisy engines or compressors.	Contractor	Resident engineer	1000
3	Water resources	Wastewater from the worker rest areas or construction offices should be contained in solid containers and should be removed regularly from site by means of authorized contractors.	Contractor	Resident engineer	1000
		<ul style="list-style-type: none"> <li>In case of using septic tanks on site, the engineering drawings of these tanks should be presented to the Resident Engineer for approval.</li> </ul>	Contractor	Resident engineer	Included in contractor cost
4	Soil	<ul style="list-style-type: none"> <li>To prevent soil contamination by oil/grease spills, leakages or releases, all manipulations of oil derivatives in the process of construction and provision of the fuel to the machines should be performed with maximum care; leak proof containers should be used for storage and transportation of oil/grease and wash off from the oil/grease handling area shall be drained through drains and treated appropriately before disposal;</li> <li>Construction waste and debris shall be collected on a regular basis and disposed of at designated landfills;</li> <li>Only authorized quarries shall be used for purchasing soil to be used for embankment, padding, bedding, backfilling during construction; and</li> <li>It must be prohibited to operate equipment and vehicles outside the designated</li> </ul>	Contractor	Resident engineer	Included in contractor cost

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		work areas and roads.			
		<ul style="list-style-type: none"> <li>No hazardous waste storage to take place directly on soils. Appropriate and enclosed containers should be utilized.</li> </ul>	Contractor	Resident engineer	1000
5	<b>Solid and hazardous wastes</b>	<ul style="list-style-type: none"> <li>Minimize waste generation on site.</li> <li>Simple waste management plan for specific waste streams must be developed.</li> <li>General waste must be collected and transported to local council approved disposal sites.</li> <li>Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors.</li> <li>Waste containers must be located at each worksite.</li> <li>Chemical wastes must be collected in 200 liter drums (or similar sealed container), appropriately labeled, for safe transport to an approved chemical waste depot or collection by a liquid waste treatment service.</li> <li>Allocate and prepare areas for temporary storage of scrap.</li> <li>Storage, transport and handling of all chemicals must be conducted in accordance with all legislative requirements, through licensed contractors and in coordination with the local authority.</li> <li>All hazardous wastes must be appropriately stored in bounded areas and should be clearly identified as “hazardous”.</li> <li>Transportation and disposal of hazardous wastes should be done through licensed contractors and in close coordination with the relevant local authority and in compliance with the legal requirements and instructions of the ministry of science and technology previously.</li> <li>Hazardous liquids, such as solvents, rust proofing agents and primer must be managed in accordance with the requirements of relevant legislation and industry standards.</li> <li>A hazardous materials inventory for the construction period must be prepared.</li> </ul>	Contractor	Resident engineer in coordination with the local authority and ministry of science and technology regarding hazardous wastes	1000

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<ul style="list-style-type: none"> <li>Material Safety Data Sheets (MSDS) for hazardous materials must be available on-site during construction and made available and explained to workers.</li> <li>Hydrocarbon wastes, including lube oils, must be collected for safe transport off-site for reuse, recycling, transport or disposal at approved locations.</li> </ul>			
6	Flora & Fauna	Not Applicable	Not Applicable	Not Applicable	Not Applicable
7	Topography and landforms	Not Applicable	Not Applicable	Not Applicable	Not Applicable
8	Traffic	<ul style="list-style-type: none"> <li>Where practicable, truck deliveries must be restricted to daytime working hours.</li> <li>Clear traffic signs and signs signals must be installed on-site to provide for safe traffic.</li> <li>In case a narrow access road needs to be occupied for limited period (for example by loading/unloading trucks or loaders) the occupation time should be minimized.</li> <li>The contractors should make sure that the employed drivers of construction machinery (such as trucks and loaders) have received sensitization/training on safety utilization of their machines in order to minimize accidents risks.</li> </ul>	Contractor in coordination with the Local Traffic Department for some sections	Resident Engineer	500
9	Health and Safety	<ul style="list-style-type: none"> <li>Limit speed of construction vehicles and provide road signage for drivers and local community.</li> <li>Only allowing trained and certified workers to install, maintain, or repair electrical equipment.</li> </ul>	Contractor	Local traffic department in coordination with Resident engineer	1000

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
	<ul style="list-style-type: none"> <li>• Qualified personnel must be employed for the construction equipment, and personnel must be trained for health and safety issues.</li> <li>• The contractor shall prepare an OHS plan and emergency procedures.</li> <li>• Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas), and education / public outreach to prevent public contact with potentially dangerous equipment;</li> <li>• Grounding conducting objects (e.g. fences or other metallic structures) installed near power lines, to prevent shock.</li> <li>• Personal protection equipment such as eyeglasses, gloves, hard heads and safety belts must be supplied and continuously used by all workers, technicians, engineers and site visitors.</li> </ul>	Contractor	Resident engineer	1500
	<ul style="list-style-type: none"> <li>• compliance with international standards for good construction practices;</li> <li>• adherence to local and international guidance and codes of practice on EHS management during construction;</li> <li>• implementation of EHS procedures as a condition of contract with contractors and their sub-contractors;</li> <li>• pre-construction assessment of the EHS risks and hazards associated with construction and operation, including consideration of local cultural attitudes, education level of workforce and local work practices;</li> <li>• provision of appropriate training on EHS issues for all construction and operation workers, including initial induction and regular refresher training, taking into account local cultural issues;</li> <li>• provision of health and safety information;</li> </ul>	Contractor	Resident engineer	Included in contractor cost
	<ul style="list-style-type: none"> <li>• For working at height: Testing structures for integrity prior to undertaking work</li> <li>• Installation of fixtures on tower components to facilitate the use of fall protection systems;</li> <li>• Implementation of a fall protection program that includes training in climbing</li> </ul>	Contractor	Resident engineer	1000

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
		<p>techniques and use of fall protection measures</p> <ul style="list-style-type: none"> <li>Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached;</li> </ul>			
		<ul style="list-style-type: none"> <li>Any accidents to be reported and treated within site as a first aid procedure.</li> <li>Fuel and oil changing shelters should be equipped with necessary firefighting and safety equipment</li> <li>First aid items should be available all times onsite and trained staff on emergency aids should be identified.</li> </ul>	Contractor	Resident engineer in coordination with health & safety officials.	1000
10	<b>Handling Complaints</b>	<ul style="list-style-type: none"> <li>A complaints register will be kept on site and this will feed into the GRM. Details of complaints received will be incorporated into the audits as part of the monitoring process.</li> </ul>	Resident Engineer	PMT	Included in contractor cost
11	<b>Social impacts</b>	<ul style="list-style-type: none"> <li>Job opportunities should be primarily provided to the community people adjacent to the electrical grid lines.</li> <li>Community leaders should be represented in a Steering Committee. They should be informed about the job opportunities available for the community people.</li> <li>The community should voice their concerns through appropriate grievances and redress mechanism.</li> <li>It is strongly recommended that PMT should provide awareness rising among the community that the EMF impact is limited in case of respecting the ROW.</li> </ul>	Contractor	RE/PMT	Included in contractor cost
12	<b>Child labor and Gender Based Violence</b>	<ul style="list-style-type: none"> <li>Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exist in the subproject</li> <li>The PMT will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).</li> </ul>	Contractor	Resident engineer	Included in contractor cost



Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated Cost in US\$
	<ul style="list-style-type: none"> <li>• Labor influx should also be managed by contractor and ensure Code of Conduct is introduced and applied to avoid impact on local community and provide mitigation measure for GBV risks</li> <li>• The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance</li> <li>• The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and gender based violence and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities.</li> </ul>			
<b>Total cost US\$ (rehabilitation phase)</b>				<b>10,000</b>

**Table 6-2: Environmental Management Plan (ESMP) during Operation Phase of electrical distribution grid lines**

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated
1	• Air quality	• The net impact of the Project on air quality is not significant and temporary, and will be limited to Construction Period.	Not Applicable	Not Applicable	Not Applicable
2	• Noise	• Vibration or humming noise can be noticeable and is most often associated with older electrical grid lines. It is usually the result of conductor mounting hardware that has loosened slightly over the years and can be easily repaired by the local authority, especially near residential areas or other sensitive receptors such as schools and hospitals	Local authorities	Local authorities	No Cost
3	<b>Water resources</b>	Not applicable	Not applicable	Not applicable	Not applicable
4	<b>Soil</b>	Not applicable	Not applicable	Not applicable	Not applicable
5	<b>Solid &amp; hazardous wastes</b>	<ul style="list-style-type: none"> <li>• During the operational period, some littering and waste generation resulting from the repair activities will occur (Oil from transformer). Littering may occur due to wind action.</li> <li>• Providing adequate secondary containment for fuel storage tanks and for the temporary storage of other fluids such as lubricating oils and hydraulic fluids,</li> <li>• Using impervious surfaces for refueling areas and other fluid transfer areas</li> </ul>	Local Authority (Municipality)	Local authority (Municipality)	Within municipal budget
6	<b>Flora &amp; Fauna</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable
7	<b>Topography and landforms</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable
8	<b>Handling Complain</b>	The continued operation of a GRM for one year following opening of the electrical grid lines for use will ensure that local community members have an accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.	Local authorities	Local authorities	No cost
9	<b>Health and Safety</b>	<ul style="list-style-type: none"> <li>• Only allowing trained and certified workers to install, maintain, or repair electrical equipment</li> <li>• Deactivating and properly grounding live power distribution lines before work is</li> </ul>	Local authorities	Local authorities	No cost

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated
	<p>performed on, or in close proximity, to the lines</p> <ul style="list-style-type: none"> <li>• Ensuring that live-wire work is conducted by trained workers with strict adherence to specific safety and insulation standards. Qualified or trained employees working on transmission or distribution systems should be able to achieve the following: 1- Distinguish live parts from other parts of the electrical system 2- Determine the voltage of live parts 3- Understand the minimum approach distances outlined for specific live line voltages 4- Ensure proper use of special safety equipment and procedures when working near or on exposed energized parts of an electrical system.</li> <li>• Workers should not approach an exposed energized or conductive part even if properly trained unless: 1- The worker is properly insulated from the energized part with gloves or other approved insulation; or, 2- The energized part is properly insulated from the worker and any other conductive object; or, 3- The worker is properly isolated and insulated from any other conductive object (live-line work).</li> <li>• Where maintenance and operation is required within minimum setback distances, specific training, safety measures, personal safety devices, and other precautions should be defined in a health and safety plan</li> <li>• Workers not directly associated with power transmission and distribution activities who are operating around power lines or power substations should adhere to local legislation, standards, and guidelines relating to minimum approach distances for excavations, tools, vehicles, pruning, and other activities;</li> <li>• Minimum hot stick distances may only be reduced provided that the distance remaining is greater than the distance between the energized part and a grounded surface.</li> <li>• Testing structures for integrity prior to undertaking work;</li> <li>• Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers, among others;</li> <li>• Establishment of criteria for use of 100 percent fall protection (typically when working over 2 meters above the working surface, but sometimes extended to 7 meters,</li> </ul>			

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated
	<p>depending on the activity). The fall protection system should be appropriate for the tower structure and necessary movements, including ascent, descent, and moving from point to point;</p> <ul style="list-style-type: none"> <li>• Installation of fixtures on tower components to facilitate the use of fall protection systems;</li> <li>• Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached;</li> <li>• Hoisting equipment should be properly rated and maintained and hoist operators properly trained;</li> <li>• Safety belts should be of not less than 16 millimeters (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibers become evident;</li> <li>• When operating power tools at height, workers should use a second (backup) safety strap;</li> <li>• Signs and other obstructions should be removed from poles or structures prior to undertaking work;</li> <li>• An approved tool bag should be used for raising or lowering tools or materials to workers on structures.</li> <li>• Identification of potential exposure levels in the workplace, including surveys of exposure levels in new projects and the use of personal monitors during working activities;</li> <li>• Training of workers in the identification of occupational EMF levels and hazards;</li> <li>• Establishment and identification of safety zones to differentiate between work areas with expected elevated EMF levels compared to those acceptable for public exposure, limiting access to properly trained workers;</li> <li>• Implementation of action plans to address potential or confirmed exposure levels that exceed reference occupational exposure levels developed by international organizations such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and the Institute of Electrical and Electronics Engineers (IEEE).</li> <li>• Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding</li> </ul>			

Receptor		Mitigation Measures	Responsibility	Supervision	Total estimated
		<p>transmission towers, particularly in urban areas), and education / public outreach to prevent public contact with potentially dangerous equipment;</p> <ul style="list-style-type: none"> <li>• Grounding conducting objects (e.g. fences or other metallic structures) installed near power lines, to prevent shock.</li> </ul>			
10	Child labor and Gender Based Violence	<ul style="list-style-type: none"> <li>• Rigid obligations should be applied in order to warrantee no child labor exist in the subproject.</li> <li>• The Local authorities will be responsible to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).</li> <li>• Labor influx should also be managed by contractor and ensure Code of Conduct is introduced and applied to avoid impact on local community and provide mitigation measure for GBV risks</li> <li>• The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and gender based violence and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities.</li> </ul>	Local authorities	Local authorities	No Cost
<b>Total cost US\$ (Operation phase)</b>					<b>No Cost</b>

## **7. ENVIRONMENTAL AND SOCIAL MONITORING PLAN**

### **7.1 Environmental and Social Monitoring**

In order to ensure full compliance of the performed activities to the environmental and social requirements, regular monitoring should be performed. For this purpose, an environmental and social monitoring program has been established for the construction phase to ensure the proper implementation of the environmental and social mitigation measures.

### **7.2 ESMP Institutional Arrangements**

In order to ensure full compliance with the environmental and social requirements which are described above, PMT nominated a qualified engineer to act as the focal point for environmental and social affairs at the central level. On the field level, PMT nominated two engineers in Salah Al-Din to act as environmental and social officers. Those engineers will be trained on monitoring and reporting of environmental and social impacts and how to fill the checklist to be used during field visits before implementation starts.

The Resident Engineer will be the officially responsible staff member for ensuring environmental and social compliance. S/He will be assisted by the designated environmental and social field officers.

In addition, a qualified consultant is recruited by the PMT to provide technical assistance and capacity building to the environmental and social team both at the central level and at the field level.

**Table 7-1: Monitoring Activities During Rehabilitation Phase**

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	<ul style="list-style-type: none"> <li>Investigate dust complaints from workers and residents</li> <li>Visual inspection of vehicles and equipment operating or entering the site and Measurements of exhaust emissions (CO, SO<sub>x</sub>, NO<sub>x</sub>, PM10, PM2.5)</li> </ul>	<ul style="list-style-type: none"> <li>Recorded and documented complaints</li> <li>Record the status of equipment and vehicles on site (excessive black or white smoke)</li> </ul>	<ul style="list-style-type: none"> <li>Daily visual inspection</li> <li>Once every six month</li> </ul>	Resident Engineer	PMT	1,000
2	Noise	Investigate noise complaints from workers and neighboring communities in the affected locations	<ul style="list-style-type: none"> <li>Recorded and documented complaints</li> <li>Recorded tests results</li> </ul>	<ul style="list-style-type: none"> <li>Weekly inspection of complaints</li> <li>Only in case of complains</li> </ul>	Resident Engineer	PMT	1,000
3	Water resources	<ul style="list-style-type: none"> <li>Investigate implementation of mitigation measures and observe any oil or fuel spills.</li> <li>Investigate wastewater disposal measures</li> </ul>	Site Investigation report	Daily Investigation	Resident Engineer	PMT	No cost
4	Soil	<ul style="list-style-type: none"> <li>Observe any soil contamination with oil or fuel</li> <li>Observe any accumulation of wastes</li> </ul>	Site Investigation report	Monthly	Resident Engineer	PMT	No cost

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>Maintain records on waste types and quantities</li> <li>Observe any waste accumulation in un approved locations</li> </ul>	<ul style="list-style-type: none"> <li>Waste management contracts with authorized contractors</li> <li>Waste delivery receipts from local authorities.</li> </ul>	<ul style="list-style-type: none"> <li>Weekly</li> <li>Weekly</li> </ul>	Resident Engineer	PMT	No cost
6	Health and safety	<ul style="list-style-type: none"> <li>Ensure compliance of workers to Health and Safety requirements</li> <li>Maintain log on accidents</li> </ul>	Observation report Accidents report	Weekly	Resident Engineer	PMT	No cost
7	Flora & Fauna	Record any observation about wild animals or plants on site or nearby and report to the Environmental Authority	Observation report	Upon occurrence	Resident Engineer	PMT	No cost
8	Topography and landforms	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
9	Traffic	Ensure speed limits and warning signs are installed	Road signs are installed.	Monthly	Resident Engineer	PMT	No cost
10	Handling Complaints	Ensure that the GRM is effective and well communicated	Number of complaints received, analyzed and responded to.	Weekly	Resident Engineer	PMT	No cost
11	Child labor and Gender Based Violence	<ul style="list-style-type: none"> <li>Ensuring that children and minors are not employed directly or indirectly on the project.</li> <li>Ensure to prevent misconducts, including prevention of sexual harassment and gender based violence.</li> </ul>	<ul style="list-style-type: none"> <li>A copy of IDs of laborers and labor registry.</li> <li>Percentage of workers that have attended the code of conduct training and number of GBV training delivered.</li> </ul>	<ul style="list-style-type: none"> <li>Daily</li> <li>Weekly</li> </ul>	Resident Engineer	PMT	No cost
<b>Total cost US\$ (Operation phase)</b>							<b>2,000</b>



**Table 7-2: Monitoring Activities during Operation Phase**

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
1	Air quality	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
2	Noise	Investigate noise from vibration or humming noise in the affected locations	<ul style="list-style-type: none"> <li>Recorded and documented complaints</li> <li>Recorded tests results</li> </ul>	Only in case of complains	Resident Engineer	Local authorities	No cost
3	Water resources	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
4	Soil	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
5	Solid and hazardous wastes	<ul style="list-style-type: none"> <li>Maintain records on waste types and quantities</li> <li>Observe any waste accumulation in un approved locations</li> </ul>	<ul style="list-style-type: none"> <li>Waste management contracts with authorized contractors</li> <li>Waste delivery receipts from local authorities.</li> </ul>	Weekly	Resident Engineer	Local authorities	No cost
6	Health and safety	<ul style="list-style-type: none"> <li>Ensure compliance of workers to Health and Safety requirements</li> <li>Maintain log on accidents</li> </ul>	Observation report Accidents report	Weekly	Resident Engineer	Local authorities	No cost
7	Flora & Fauna	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost

Receptor		Monitoring Activities	Monitoring Indicators	Frequency	Responsibility	Supervision	Total estimated Cost in US\$
8	Topography and landforms	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
10	Handling Complaints	No monitoring required	Not applicable	Not applicable	Not applicable	Not applicable	No cost
11	Child labor and Gender Based Violence	<ul style="list-style-type: none"> <li>Ensuring that children and minors are not employed directly or indirectly on the project.</li> <li>Ensure to prevent misconducts, including prevention of sexual harassment and gender based violence.</li> </ul>	<ul style="list-style-type: none"> <li>A copy of IDs of laborers and labor registry.</li> <li>Percentage of workers that have attended the code of conduct training and number of GBV training delivered.</li> </ul>	Weekly	Resident Engineer	Local authorities	No cost
<b>Total cost US\$ (Operation phase)</b>							<b>No cost</b>

### **7.3 Reporting requirements**

In order to ensure that the mitigation and monitoring measures are being carried out effectively with the required frequency, a clearly defined and regular reporting and response system must be established. The needed frequency of report generation for inspection is to be monthly, and for auditing twice a year, environmental monitoring is once per year.

The information will be made available to the relevant regulatory authorities as required. In addition to the monitoring and reporting requirements documented in the relevant sections of the ESMP, the following reporting regime will be implemented:

- a) All incidents or accidents during the rehabilitation should be reported immediately to relevant authorities.
- b) All corrective measures must be discussed to ensure compliance with laws and regulations.
- c) Reports for personnel training on environmental issues or emergency practices must be produced.
- d) Progress reports, environmental monitoring report and other inspections reports must be produced periodically.

The PMT environmental and social field officers will provide the Resident Engineer with a weekly report briefing their observations and recommendations for action. Whereas the Resident Engineer shall prepare an environmental and social management report on monthly basis to PMT in Baghdad.

The environmental and social consultant will prepare a monthly environmental and social supervision report after conducting site supervision visits.

On quarterly basis, PMT shall prepare an environmental and social progress report which will be submitted to the international financial institution (WB) for review and disclosure.

### **7.4 Capacity Development and Resources Requirements**

PMT dedicated sufficient human resources to undertake the environmental and social management requirements as explained above. The assigned staff at the central and field levels are competent in the field of engineering and have variable practical experience. For the staff who will be responsible for undertaking the environmental and social tasks, they will require some capacity development.

All construction personnel and contractors are required to undertake appropriate environmental training and induction programs including, importantly, on GRM procedures.

All managers and supervisors will be responsible for ensuring that personnel under their control have the requisite competencies, skill and training to carry out their assigned tasks in accordance with the requirements of the ESMP. They will also be responsible for identifying additional training and competency requirements.

All project supervisors and managers will receive additional detailed training on the use and implementation of the ESMP. The following Table presents the proposed institutional strengthening program and capacity development requirements.

**Table 7-3: Capacity Development Requirements**

Capacity development topic		Provider(s)	Duration	Estimated Cost (US\$)
1	Environmental Impact Assessment Environmental and social Management in Construction Sites	Consultant	3 Days	1,500
2	Iraqi Environmental Legal Requirements	Ministry of Environment	1 Day	500
3	World Bank Environmental and Social Safeguards	Consultant	2 Days	1,000
<b>Total Estimated Cost</b>				<b>\$3,000</b>

In order to ensure full compliance of the environmental and social requirements, regular site visits should be conducted. Dedicated office spaces, office equipment and supplies in addition to adequate means of transportation should be made available for the environmental and social management team at the central level and most importantly on the field level. MOP PMT should ensure the allocation of sufficient budget resources to ensure availing the required resources to achieve the required tasks.

## 8. PUBLIC CONSULTATION RESULTS

According to the WB policies, it is required that broad and open public consultations be held with PAPs on the project. These consultations are to ensure that the PAPs are provided with the opportunity to engage in the rehabilitation planning process, to raise questions and receive input and responses to their concerns.

### 8.1 Consultation Process:

In order to fulfill the WB requirements, public consultation and also one on one interview were adopted to obtain sound information on the possible impacts on the local communities. Accordingly, a questionnaire was formatted to cover the key environmental and social aspects related to the subprojects. It was difficult to conduct the public consultation with the women due to the tribe's habits that exist in the area of the project. However, individual interview with women was conducted to take the women's opinions freely. The questionnaire was then addressed to ten women of the local individuals in the surrounding community randomly to have their opinions and thoughts regarding the construction activities.

### 8.2 Consultation Results:

The public consultations were carried out in the three villages for rehabilitation of the Electricity grid during period of Oct 1-2, 2019. The public consultations included only men and number of participants were 15, 10 and 11 in village 1, 2 and 3 respectively. The registered results out of the consultations that the rehabilitation of the electricity grid is a priority of all villages due to weak power supply of the current grid which does not accommodate home appliances and the operation of the agriculture pumps.

Additionally, the participants from the three villages agreed that, the rehabilitation activities will have a positive impact on their social daily life. Please refer to annex 3 for more details. As per the questionnaire prepared for individual interview, the below are the main findings.

1. All questioned locals agreed that the rehabilitation activities will have a strong positive impact from the social perspectives on the locals.
2. No claims from any locals were recorded or alleged regarding the ownership of the land where the electrical grid lines are constructed; all agreed that is governmental land property.
3. No vegetation covers, crops, plants, trees...etc. will be removed in order to execute the rehabilitation activities of the electrical grid lines.
4. The interests of the locals will not be affected in any way by the rehabilitation activities.
5. No infrastructure within the electrical grid lines area will be affected negatively due the reconstruction activities.
6. No deportation, dislocation of any of the local community will be needed due to these activities.

7. The rehabilitation of the project will enhance the social relationship among the locals; improve their achievements and performance via the availability of electricity.
8. All locals agreed that the project (s) will need more instructional signs near the electrical grid lines area.

During public consultation, information about GRM was introduced to local people and they were informed that they can submit their complaint to either site engineer, or to community leader or to PMT during rehabilitation. The community leaders' information and PMT contact information will be available before implementation starts.

## **9. GRIEVANCE REDRESS MECHANISM**

The proposed GRM for the SFDP aims to resolve issues that could come across implementation promptly, more efficiently, and accurately. The design of the GRM system should provide means for collecting supportive documents and evidences, investigating the problem, and supporting the final decision. An effective GRM is characterized by: diversity, clear procedures, swift responses, and allowing for two-way communication.

Complainants would commonly approach this GRM for many reasons, including those related to incomplete or no service, vague procedures, inappropriate/ unfair treatment by the staff, and harm (environmental and/or social) to individuals or groups as a result of carrying out the Project's interventions.

The complaint/ grievance, once received, should be promptly resolved or undergone further investigation. Complaints are sorted out according to complexity. Direct responses should be given to simple inquiries by concerned staff members in 3-6 working days as a maximum, and should be documented and archived as per the relevant procedure. While, more comprehensive measures should be applied to complex issues, including field investigation and communicating with higher management for final decisions within a timeframe of 20 working days as a maximum. After the completion of the proceedings, the complaint is closed, and information is included in the system, including the action(s) taken and the result(s) required. The complainant shall be notified of the result and the action immediately and informed of the possibility of objecting to the procedure. See detailed procedures in the main ESMF report.

In addition to PMO, the MOP, project offices in governorates, and Community Development Groups (CDGs), the World Bank's Grievance Redress can also be approached for reporting and resolving issues.

In any case, the PMT must maintain records of grievances and complaints, including minutes of discussions, recommendations and resolutions made. Participants were informed that they can submit their complaint to either site engineer, or to community leader or to PMT during construction. The PMT contact information (office and mobile phone numbers) will be available before implementation starts and will be posted at the entrance of the project site

**Table 9-1: Contact Information for GRM**

#	Name	Job Title	Phone Number	E-mail
1	Ahmed Ibrahim		07701830500	<a href="mailto:Basmamohammed337@yahoo.com">Basmamohammed337@yahoo.com</a>
2	Hussam Shaael	Translator	07827793093	<a href="mailto:hussamshail@yahoo.com">hussamshail@yahoo.com</a>
3	Ibtisam Jasim	Deputy head	07724674469	<a href="mailto:Sfd.iraq.2018@gmail.com">Sfd.iraq.2018@gmail.com</a>

A checklist of issues to be considered in the design of the GRMs includes the following:

- a. An inventory of any reliable conflict mediation organizations or procedures in the project area is undertaken and an assessment made to determine if any of these entities or procedures might be used, ensuring that complaints were received and addressed in an effective, timely and transparent manner.
- b. Good practice is to ensure that PAPs can apply orally and in the local language and to impose explicit time limits for responding to grievances received. Appeal procedures need to be specified, and this information is made publicly available therefore, allow for both verbal and written grievances to be lodged with the local project authorities, who will transmit these to the local level committee for review, consideration and response.

## 10.ANNEXES

### Annex (1): Grievance Form

<b>Reference No:</b>	
<b>Full Name</b> <i>Note: you can remain anonymous if you prefer or request not to disclose your identity to the third parties without your consent</i>	My first name _____ My last name _____ <b>I wish to raise my grievance anonymously</b> <b>I request not to disclose my identity without my consent</b>
<b>Contact information</b>  <b>Please mark how you wish to be contacted (mail, telephone, e-mail).</b>	<b>By Post: Please provide mailing address:</b> _____ _____ <b>By Telephone:</b> _____ <b>By E-mail</b> _____
<b>Description of Incident or Grievance:</b> What happened? Where did it happen? Who did it happen to? What is the result of the problem?	
<b>Date of Incident/Grievance</b>	<b>One-time incident/grievance (date _____)</b> <b>Happened more than once (how many times? ___)</b> <b>On-going (currently experiencing problem)</b>
<b>What would you like to see happen to resolve the problem?</b>	
Signature: _____ Date: _____ <b>Please return this form to:</b> [name], _____ [company name] _____ Address _____: Tel.: _____ or E-mail: _____	



## Annex 2: Public Consultations form

### Questionnaire Form in English:

Name of the project:			
Location of the project:			
Name of the respondent:			
Occupation of the respondent:			
Date of visit:			
1	In your opinion, would the rehabilitation of the project have positive impact on the residents of the area?	yes	no
2	Are there any claims on private land ownership in the project area?	yes	no
3	Would there be any damages to income generating crops, trees, and vegetation due to the rehabilitation activities?	yes	no
4	Would there be any losses of income of local residents due to the rehabilitation activities?	yes	no
5	Would there be any damages whether permanent or temporary which would affect the livelihood of the residents due to the rehabilitation activities?	yes	no
6	Would the rehabilitation activities require relocation of the residents of the area, whether permanent or temporary?	yes	no
7	Is there any usage by local residents of the facilities or land of the facilities by the local residents?	yes	no
8	In your opinion, would there be any negative social impacts due to the rehabilitation activities?	yes	no
9	Would there be any changes to the demographics or social structure in the project area induced by the rehabilitation activities?	yes	no
10	Is there any need for warning and directional signage during the rehabilitation activities?	yes	no
Name and signature of the interviewer:			

### Annex (3): Public Consultation

اسم القرية :

قرية الاصباب

موقع القرية

محافظة صلاح الدين / قضاء / الضلوعية / ناحية / تربية / مركز / قرية / الاصباب

أولويات القرية :

1- تجهيز وصيانة محولات عدد (6) وقابليات مع ملحقاتها واعمد الكهراباد عدد ٣٢ مع تراطم الدورة وحسب متطلبات العمل  
2- انشاء طريق ريفي في محافظة صلاح الدين اقرية الاصباب

اسباب اختيار المشاريع :

1- تم اختيار مشروع الكهراباد لكون الكهراباد في القرية ضيقه ونقل الترانسمية 1٦٥ قوت همت سد حباب التربة بشكل جزئي ولا يمكن تشغيل الاجهزة ذات المركبات العاليه ولذلك من غير الممكن تشغيل الماطورات الزراعيه الخاصه بالسقي وان هذه المحركات والتوسع مطلوبه للتعبئة  
2- تم اختيار المشروع الخاص بالطرق نتيجة عدم وجود طريق مبلط وعليه جميع المؤسسات الحكوميه (مدارس ومسوحات واسواق)

وصف المشاريع :

1- مشروع الكهراباد / يتكون من تجهيز وصيانة محولات عدد (6) وقابليات وملحقاتها واعمد الكهراباد عدد ٣٢ مع تراطم دوره  
2- مشروع التبلط / يتكون من منتصف التربة ~~والتي~~ بسلك ٥٥م وفرشها طبقات تراب وصف الخايط مع الحول والتسويه تم التبلط بطريقه  
سلك ٥٥م

التوقيع	الاسم	التسلسل
	عزاف حاسم عبا	- ١
	مشعل صالح محمد رصيم	- ٢
	محمد هلف صالح	- ٣
	عزاف غازي محلي محمود	- ٤
	حاسم محمد عطيه	- ٥
	محمد هلف عبا	- ٦
	محمد صالح هلف	- ٧
	حاسم محمد حسين	- ٨
	حاسم حاسم هلف	- ٩
	طلال محمد هلف	- ١٠
	حاسم امور حاسم	- ١١
	حاسم محمد حاسم	- ١٢
	حاسم نصيف حاسم	- ١٣
	عطا الله شكر محمود	- ١٤
	محمد هلف غازي	- ١٥

اسم القرية :

قرية البوطية

موقع القرية

جامعة/ صلاح الدين قضاء / سارو ناحية / المعقم

أولويات القرية :

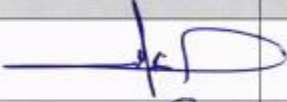









- 1- إنشاء مدرسة صف 6
- 2- تجهيز ونصب محولات مع كاسات المالحقات

أسباب اختيار المشاريع :

- 1- لا يوجد مدرسة في قرية البوطية حيث ان اوروبا مدرسه هي قانوية للمعقم للسين والين بتقدر وايقاريا ه كم عن القرية وكذلك الكمال بالبال للبيات مما أدى الى عدم تحمّل الأهلين الاحمال وطلبتهم المتوسطة والاعدادية حيث يوجد في القرية مدرسه ابتدائية فقط
- 2- ان المدارس والمواد التعليمية غير كافية في القرية كما ان كاسات المالحقات هي بالبال للمعقم
- 3- تعاني القرية من ضعف البنية التحتية و حاجتها الى محولات لتبنيه زيادته الاحمال والتوسع السكني فيها

وصف المشاريع :

- 1- إنشاء مدرسه : وتضمن العمل إنشاء مدرسه صف (6) حيث ان الماسه 200 م<sup>2</sup> وطاقته واحد مع مياح صفه مدرسه واحد وسامه اشجار بوسامه 20 م<sup>2</sup> وفتح اداري ليشتمل على الميزانية والمعونات والكادر التدريسي
- 2- تجهيز ونصب محولات : ويشمل المشروع تجهيز ونصب محولات عمود (4) وتابلوات مع ملحقاتها واحده كصريا عمود (36) مع قراصل دوره وحسب متطلبات العمل

التوقيع	الاسم	التسلسل
	علاء محمد الرحمن محمود	1-
	سعد الحفيد محمود	2-
	مervان صالح عبيد	3-
	عبد الناصر محمود حسين	4-
	كريم مطلق دايل	5-
	عبد الرحمن محمود الحفيد	6-
	أحمد نايف صديب	7-
	أحمد الحفيد محمود	8-
	الرشيد عبد الكريم	9-
	مervان عبد الحميد	10-

اسم القرية :

اي دلف

موقع القرية

محافظة اهلح الدين قضاء الدور

اولويات القرية :

- ١- تأهيل الطريق الرابع بين الويح و القعاء
- ٢- عيّن الطاقة الكهربائية
- ٣- استاذ مدرس س ٦ ص ٦

أسباب اختيار المشاريع :

- ١- بناء ١٠ تأهيل الطريق قاتن الويح الى لا قد تعرض (١) التقادم نتيجة الرامه هبت تم استشاره منظمات القون السابق اضافة (١) تعرضه للاقرار نتيجة الامداد الاصبه لعام ٢٠١٦
- ٢- بناء للطاقة الكهربائية تان قرية ابو دلف قد تعرضت الى دمار كبير في المرحلات الاصلية وقام الكهربائي بتارعه امتلاك داعش للقرية
- ٣- توحيد مدرس داخل قرية ابو دلف الا ان تلك المدرس يدوام مزدوج وانا عدد الطلاب يتزايد قان المدرس المشرف عمل مستكله في وقت لاحق

وصف المشاريع :

- ١- مشروع استاذ مدرس س ٦ (٦) صفات لاسام ٢٥٠٠ م<sup>٢</sup> بطايق واحد مع مجامع صحة عدد واحد وسام انتكنا - بيسام ٥٦ م<sup>٢</sup> و صناع اداري يتتمن عمن المدرس والمعاون والتاوير التدريسي
- ٢- تجهيز وطيب حملات: وسجل المسمى بحمير رصبا حملات عدد (٧) وقايلوات مع مكنتها واعنده كهرباء عدد (٣٦) م<sup>٢</sup> قرا طو دوره وصبي وتطلبات العمل.

التوقيع	الاسم	التسلسل
	فيسال سعيّد	١-
	احمد كوضا هيران	٢-
	احمد مبيون هندي	٣-
	راميد فاضل غباح	٤-
	حنان زهير عبدالله	٥-
	نافيق احمد الحاج	٦-
	معتز احمد	٧-
	احمد سلام ياسين	٨-
	مبيون رشيد	٩-
	حنان بيلال	١٠-
	مبيون احمد	١١-







(استبيان)

اسم المشروع: كوراء قرية الاصحاب

الاسم: مسعل صالح محمد

انثى

ذكر

المهنة: سقاة

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائلته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان متناثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستنسب باجراءات اعادة توظيف لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



التوقيع:

الاسم: مسعل صالح محمد

التاريخ: 2019 / ١٠ / ١

(استبيان)

اسم المشروع : نهج بارق في الارض

الاسم : هه خلف صالح

الجنس :  ذكر  أنثى

المهنة : متقاعد

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
٦	هل ان اعمال اعمار المشروع ستمسب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<u>كلا</u>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<u>كلا</u>	



التوقيع:

الاسم : هه خلف صالح

التاريخ : 2019 / ١٠ / ١

(أستبيان)

اسم المشروع: كعبه قرى الإصم  
الاسم: مائيت أوداليم  
الجنس:  ذكر  أنثى  
المهنة: متقاعد

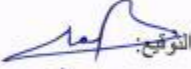
ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>		
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائلته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>		
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>		
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>		
٦	هل ان اعمال اعمار المشروع ستسبب باجراءات اعادة توطین لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>		
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>		
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>		
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>		
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>		

التوقيع:   
الاسم: مائيت أوداليم  
التاريخ: 2019 / ١ / ١

(استبيان)

اسم المشروع: تجهيز وضف محلات عدد ٦ وكابلات مع ولائها فزا وا عمده كهريا دبر  
الاسم: ٣٤٢ مع سواطح دوره وصوب سَطَبات العمل  
مأاره أديبا جاسم  
الجنس: ذكر  أنثى   
المهنة: رباح برب

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:   
الاسم: تمارة أديبا جاسم  
التاريخ: 2019 / /

(استبيان)

اسم المشروع : جهدتري ريفي محمول عدو ٦٠٠٠ ومعالجات مع ملائمة داعمه كهربا عدو  
الاسم : زرين فندرجي  
الجنس :  ذكر  أنثى  
المهنة : ربنة بيت

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعادية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائدته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توظيف لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع: زرين فندرجي

الاسم : زرين فندرجي

التاريخ : 2019/10/1

(أستبيان)

اسم المشروع: تجهيز وضبط محولات عدد ٦ / وقالبونات مع صيانة كهربا ،  
عدد ٣٤ / مع صوايح دره وضبط منظبات العمل  
الاسم: سراب زريد سعدون  
الجنس: ذكر  أنثى   
المهنة: رب بيت

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع: سراب

الاسم: سراب زريد سعدون

التاريخ: 2019 / /

(استبيان)

اسم المشروع: كربة قرية الازهار

الاسم: طلال محمد صلف

الجنس:  ذكر  أنثى

المهنة: كاتب

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان متاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

  
التوقيع:

الاسم: طلال محمد صلف

التاريخ: 2019/١٠/١



(استبيان)

اسم المشروع: كهرية قرية الاصاب


الاسم: خالد نصيف حاتم

الجنس:  أنثى

ذكر

المهنة: معلم

ت	المتوال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستتاثر بعملية اعمار المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع مستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

التوقيع:   
الاسم: خالد نصيف حاتم  
التاريخ: 2019/١٠/١١

(استبيان)

اسم المشروع: كهره قرية الاصحاب

الاسم: عاتق عباس

انثى

ذكر

المهنة: اساذ جامعي

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	/		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	/		
٣	بسبب اعمال الاصمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	/		
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاصمار؟	/		
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	/		
٦	هل ان اعمال اعمار المشروع مستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	/		
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	/		
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	/		
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاصمار؟	/		
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	/		



التوقيع:

الاسم: عاتق عباس

التاريخ: 2019 / ٩ / ١

(استبيان)


اسم المشروع: كهرمة قرية الاصاب

الاسم: جاك محمد عطية

الجنس: ذكر  أنثى

المهنة: مدرس

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>		
٣	بمبب افعال الاصمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائلته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>		
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بمبب افعال الاصمار؟	<input checked="" type="checkbox"/>		
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>		
٦	هل ان افعال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>		جاك محمد عطية
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>		
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>		
٩	هل هنالك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاصمار؟	<input checked="" type="checkbox"/>		
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>		

التوقيع: 

الاسم: جاك محمد عطية

التاريخ: 2019/١٠/١

(استبيان)

اسم المشروع: تجهيز ونصب محولات كدو (ع)

الاسم: كريم احمد مطلق

أنثى

ذكر

المهنة: مهندس (توظيف)

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هناك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هناك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هناك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توظيف لشخص او لاشخاص الي مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

كريم احمد مطلق  
التوقيع:  
الاسم: كريم احمد مطلق

التاريخ: 2019/١٠/١

(استبيان)

اسم المشروع: تجهيز ونص مولات كود (٤)

الاسم: احمد خلف احمد

الجنس: ذكر  أنثى

المهنة: موظف

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الي مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:   
الاسم: احمد خلف احمد

التاريخ: 2019 / ١٠ / ١

(أسئلة)

اسم المشروع: أجهز ونصّ صولات كرو (٤)

الاسم: صبي مطدني

أنثى

ذكر

المهنة: كاتب

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>		
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>		
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>		
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>		
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطین لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>		
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>		
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>		
٩	هل هناك تغيير ديموغرافي او ضرر في التمسح الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>		
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>		

صبي مطدني

التوقيع:

الاسم: صبي مطدني

التاريخ: 2019 / ١٠ / ١

(استبيان)

اسم المشروع: تجديد وتطوير محلات (٤) محولة

الاسم:

انثى

ذكر

الجنس:

المهنة: دكتور (صبي)

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توظيف لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل نتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

محمد السيف محمد  
التوقيع:  
الاسم:  
التاريخ: ١ / ١ / 2019

(استبيان)

اسم المشروع: تجهيز أرض محلات عدد (٤)

الاسم:

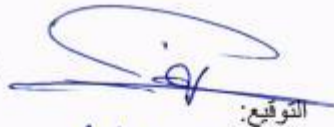
أنثى

ذكر

الجنس:

المهنة: موظف حكومي

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



التوقيع:

الاسم: محمد لطيف محمد

التاريخ: 2019/١٠/١



(استبيان)

اسم المشروع: مبنى ومبنى محلات در 4 ليرة مصر

الاسم: اسيل محمد الهني

الجنس:  ذكر  أنثى

المهنة: حريجة

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>		
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>		
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>		
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>		
٦	هل ان اعمال اعمار المشروع ستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>		
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>		
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>		
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input type="checkbox"/>		
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>		

التوقيع: Asel

الاسم: اسيل محمد الهني


التاريخ: 2019 / /

(استبيان)

اسم المشروع: تجهيز ونصب محلات عدد 4 وقابلوات / قرية البوطة  
الاسم: هناد عبد الرحمن محمد

الجنس:  أنثى  ذكر  
المهنة: معلمة

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هنالك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:   
الاسم: هناد عبد الرحمن  
التاريخ: 2019 / /

(استبيان)

اسم المشروع: تجهيز ونصب محولات عدد 4 ونا بلوات / قرية البوصحة

الاسم: عائدة شكر محمود


أنثى

ذكر

الجنس:

المهنة: محلة

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعاندية الارض المقام عليها المشروع؟		<input checked="" type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عانديته لمواطنين او السكان المحليين؟		<input checked="" type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟		<input checked="" type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستاثر بعملية اعمار المشروع؟		<input checked="" type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟		<input checked="" type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟		<input checked="" type="checkbox"/>	
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟		<input checked="" type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟		<input checked="" type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟		<input checked="" type="checkbox"/>	

التوقيع: 

الاسم: عائدة شكر محمود

التاريخ: 2019 / /

(استبيان)

اسم المشروع: ~~تجهيز~~ نضج محلات عدد (٤٤)

الاسم: عماد توفيق نضج

الجنس:  ذكر  أنثى

المهنة: مهندس (موظف)

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثر ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمار الاعمار ، هل هنالك عمليات رفع لمخاضيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمار الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

  
التوقيع:  
الاسم: عماد توفيق نضج  
التاريخ: 2019 / ١ / ١



(استبيان)

اسم المشروع: تجديد وضيق محلات عدد ٧٧ م مابلوات واعدة ٢٦/

الاسم: هاشم محمد غفور

أنثى

ذكر

المهنة: موظف

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع: هاشم محمد غفور

الاسم: هاشم محمد غفور

التاريخ: 2019 / ١٠ / ٢

(أستبيان)

اسم المشروع: تجهيز ونصب محلات عدد ٧/٧ مع مابلوات واعدة ٢٦/١

الاسم: محمد صالح

الجنس: ذكر  أنثى

المهنة: مفاعل

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هناك ادعاءات او مطالبات من قبل السكان المحليين بعتادية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>		
٣	بسبب اعمال الاعمار ، هل هناك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عانديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>		
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>		
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>		
٦	هل ان اعمال اعمار المشروع ستسبب باجراءات اعادة توظيف لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>		
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>		
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>		
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>		
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>		

التوقيع: محمد صالح

الاسم: محمد صالح

التاريخ: ٢٠١٩/١٠/٤

(أستبيان)

اسم المشروع: تجهيز ونصب محلات عدد ١٧١ مع تابلوات واحدة ٢٦١  
الاسم: هايم مجبل من  
الجنس:  ذكر  أنثى  
المهنة: مقاعد

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توظيف لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	


التوقيع: هايم  
الاسم: هايم مجبل من  
التاريخ: 2019/١٠/٤



(أستبيان)

اسم المشروع : **جهاز توصيل مولات عدد ٧ مع مابلوات واعدة عدد ٢٦**  
الاسم : **محمد رشيد محمد**  
الجنس :  ذكر  أنثى  
المهنة : **موظف**


ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعاندية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عانديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع مستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:   
الاسم : **محمد رشيد محمد**  
التاريخ : 2019/٨٠/٩

(استبيان)

اسم المشروع: تجهيز ونصب محولات عدد ٧ من مابلوت واعدة كدو/٢٦  
الاسم: ذاكركاتب مضر  
الجنس:  ذكر  أنثى  
المهنة: كاتب

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستمسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

التوقيع:   
الاسم: ذاكركاتب مضر  
التاريخ: ٢٠١٩ / ٨٠ / ٤

(أستبيان)

اسم المشروع: مجهر زنبق محلات عدد / ٧ وقابلونات مع ممتلكاتها واعدة كهرباء عدد / ٣٦  
مع تواعط الدعوة وصحب ممتلكات العمل / قرية البودلف  
الاسم: أية محمد حمدي  
الجنس: ذكر  أنثى   
المهنة: ربة بيت

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الي مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:

الاسم: أية محمد حمدي

التاريخ: 2019 ٨٠ / ٢

(استبيان)

اسم المشروع: تجهيز وضبا محلات عدد ٧ وما بجوات مع طابقتك و اعمدة كهرباء عدد ٣٦  
مع تصاوح الهوة وصيب سطلبات الكل اقلية كلب دلف  
الاسم: هوزان رعد فاضل  
الجنس: ذكر  أنثى   
المهنة: حاصبة

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائدته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان ستتأثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توظيف لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:

الاسم: هوزان رعد فاضل

التاريخ: ٢٠١٩ / ١٠ / ١

(أستبيان)

اسم المشروع: تجهيز وصيانة مولدات عدد ٧١ وقطع الحوات مع صيانة كبريتا واعمد كهرباء عدد ٣٦٧  
مع صيانة ليدية وصيانة متطلبات العمل / حربية ابو دلف  
الاسم: طارق احمد قاضل  
الجنس:  ذكر  أنثى  
المهنة: طالبة

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع مستسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:   
الاسم: طارق احمد قاضل  
التاريخ: 2019 / ٨ / ١٢

(استبيان)

اسم المشروع: تجهيز وصيانة محطات مدررا ومايلوات مع طاقمنا وكذا عمده كهرباء ومدرب  
مع مواضع الهوره وحسب متطلبات العمل / قرية ابو دك  
الاسم: عايدة فائق حسن  
الجنس:  ذكر  أنثى  
المهنة: ربة بيت

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائديته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان متاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٦	هل ان اعمال اعمار المشروع ستمسب باجراءات اعادة توطين لشخص او لاشخاص الي مناطق جديدة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٨	هل تتوقع وجود تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

التوقيع:

الاسم: عايدة فائق حسن

التاريخ: ٢٠١٩ / ٨ / ١٠

(استبيان)

اسم المشروع: تجهيز ونصب محولات عدس ٧ م تايلوات، راحة ٢٦


الاسم: عبد صالح محمد

انثى

ذكر

المهنة: كاتب

ت	السؤال	نعم	كلا	الملاحظات
١	هل تعتقد ان عملية اعمار المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع.	<input checked="" type="checkbox"/>		
٢	هل هنالك ادعاءات او مطالبات من قبل السكان المحليين بعائدية الارض المقام عليها المشروع؟	<input checked="" type="checkbox"/>		
٣	بسبب اعمال الاعمار ، هل هنالك عمليات رفع لمحاصيل زراعية او اشجار او اي غطاء نباتي تعود عائدته لمواطنين او السكان المحليين؟	<input checked="" type="checkbox"/>		
٤	هل تضررت مصالح المواطنين القاطنين بالقرب من المشروع بسبب اعمال الاعمار؟	<input checked="" type="checkbox"/>		
٥	هل هنالك اي بنى تحتية دائمية او مؤقتة تلعب دورا اساسيا في النشاطات الحيوية اليومية للسكان مستاثر بعملية اعمار المشروع؟	<input checked="" type="checkbox"/>		
٦	هل ان اعمال اعمار المشروع ستتسبب باجراءات اعادة توطين لشخص او لاشخاص الى مناطق جديدة؟	<input checked="" type="checkbox"/>		
٧	هل تمت عملية استخدام ارض المشروع من قبل السكان المحليين، علما ان الارض تابعة للدولة؟	<input checked="" type="checkbox"/>		
٨	هل تتوقع وجود تاثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال المشروع؟	<input checked="" type="checkbox"/>		
٩	هل هناك تغيير ديموغرافي او ضرر في النسيج الاجتماعي نتيجة عمليات الاعمار؟	<input checked="" type="checkbox"/>		
١٠	هل يحتاج المواطنون القريبون من المشروع لوضع علامات تحذيرية او استدلالات لزيادة معدلات الامان؟	<input checked="" type="checkbox"/>		

التوقيع:   
الاسم: عبد صالح محمد  
التاريخ: ١٠ / ٢٠١٩

## **Annex 4: Mitigation Measures during Rehabilitation Phase**

### **Air quality:**

#### **Vehicle emissions**

- Contractor to keep vehicles and machinery properly operated and maintained.
- Contractor to minimize unnecessary vehicle idling.
- Switch off any engine as soon as it is not used.

#### **Dust**

- Minimize dust from materials (such as sand, cement) and construction activities by using covers, storage, control equipment, and increasing moisture content.
- Prepare concrete before going to the site to avoid movement of materials (gravel, sand, cement) if possible
- Minimize dust from vehicle movements, using water sprays or appropriate.
- Avoid the burning of materials on site.
- Switch off any engine as soon as it is not used.

#### **Hazardous Emissions**

- Avoid storage of hazardous materials in open areas without proper covering;
- Provide adequate ventilation for work areas

### **Noise and vibration management**

- Plan for all loud activities for times that will result in the least disturbance to the local community. Work hours should be clearly established, e.g. 0700 – 2000
- Avoid or minimize transport through community areas.
- Switch off any engine as soon as it is not used.
- Contractor to minimize unnecessary vehicle idling
- Muffling of the equipment;
- Additional health check-ups for personnel handling the vibrating and noisy equipment

### **Water run-off management (drainage plan)**

- In the event that sediment is transported onto the road it should be cleaned using a street sweeper or by physically sweeping the street in cases of small areas to ensure the sediment is not washed into the drainage system with water runoff.
- Raw materials used in construction, which can be carried by water runoff, must be located and stored away from paths for water runoff.



- Where possible or appropriate, schedule works to avoid heavy rainfall periods (i.e. during the dry season) and modify activities during extreme rainfall and high winds.
- Wastewater from temporary construction camp should be adequately handled and should not be discharged to watercourses

### **Soil**

- Disposal of contaminated soil by truck to nearest authorized dumping areas.
- If surface drainage is disturbing the construction process, utilizing ditches, dikes and/or sandbags to divert this drainage from entering excavations.
- Site engineer is to monitor weather on a daily basis. No construction activities to be undertaken in strong winds or rains.

### **Solid and Hazardous waste:**

- Keeping the site clean and tidy:
  - a. Ensure there is no loose materials or debris lying around the site including the perimeter; and
  - b. Vehicles are regularly checked for cleanliness (general aspect and making sure no leaks are occurring)
- Burning of waste is prohibited
- Reducing construction waste related to on-site construction and off-site manufacture or fabrication.
- Reusing the material on site (in situ or for new applications) whenever it is possible
- Monitoring the amount of site construction waste created to make sure it does not affect the surrounding and the adjacent areas.
  - Waste is not blocking pathways
  - Construction waste will be gathered in a specific zone of the construction site
- Contractor to evacuate any construction waste to nearest authorized dumping site and on a regular basis to avoid accumulation
- All staff will avoid littering.
- Provide the septic tank for the residential effluent from the construction camp to be disposed regularly at the designated areas.

### **Hazardous materials:**

- Provide adequate secondary containment for fuel storage tanks and for the temporary storage of other fluids such as lubricating oils and hydraulic fluids.
- Use impervious surfaces for refuelling areas and other fluid transfer areas.
- Provide portable spill containment and clean-up equipment on site, and train staff in the safe use of it.
- Provide adequate sanitation facilities serving all workers (mentioned in HSE).
- Paints with toxic ingredients or solvents or lead-based paints will not be used
- All waste should be deposited through licensed haulers/transporters to licensed and regulated landfill sites appropriate to the type of waste generated (e.g. solid, household, hazardous)

### **Biodiversity:**

- Provide training to the construction crew on the impact of disturbance and damage to habitats;
- Monitor the construction crew and provide punitive measures for illegal hunting and/or fishing;
- Provide the crew with fuel for cooking to avoid burning of natural materials;
- Apply waste management plan
- Strictly prohibited disposal of any of the construction materials into the river

### **Topography and surface drainage**

- Storage areas for construction materials should be located at sites that do not permit direct runoff into watercourses and are on land sloping at less than 1.5 %.
- Time limitation on works during rainy events;
- Regular maintenance of the equipment and machinery to avoid spillage of hazardous materials;
- Re-vegetation of cleared areas
- Timely and adequate disposal of liquid and solid waste in authorized areas.

### **Traffic**

- Set up warning signs in the workplace:
  - All safe footpaths are marked; construction materials are not blocking pathways
  - Site entrances and exits are clearly marked for visitors and delivery drivers to see; and
  - If present, site reception is clearly signposted OR all visitors are escorted to the reception.
- Designating specific parking areas for workers' and visitors' vehicles outside the construction area.
- Avoid or minimize transport through community areas.
- Traffic management system and staff training, especially for site access and near-site heavy traffic.
- Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement

### **Health & safety**

- Provide adequate signage to prevent accidental falling into open areas
- Fencing of the work areas

#### Health and safety environment (HSE)

- There is posted material indicating the nearest police station and hospital (with accident and emergency facilities).
- The contractor must take reasonable steps to prevent unauthorized people accessing the site.
- Training on handling of UXO/ERW
- Avoid the burning of materials on site.

- Provide a first aid kits in different places of the work site with the appropriate number of materials given the number of workers on site. The locations of the first aid kits will be provided to all workers.
- Providing extinguishers on work site.
- If work involving the use of flammable materials is being carried out, stop people smoking and do not allow other work activities involving potential ignition sources to take place nearby.
- Providing site boundaries by installing suitable physical boundaries (barriers, tape or fence).
- Marking excavation holes with physical boundaries (barriers, tape or fence)
- The contractor should put up barriers or covers in the area of openings and excavations.
- Store building materials (such as pipes, manhole rings, and cement bags) so that they cannot topple or roll over.
- Keep walkways and stairways free of tripping hazards such as trailing cables, building materials, and debris.
- Everyone who works on any site must have access to drinking water, adequate toilet and washing facilities, a place for preparing and consuming refreshments, and an area for storing and drying clothing and personal protective equipment (PPE).
- Contractor to ensure PPE (personal protective equipment) is used by all workers on site. Basic PPE should be protective boots, hard hats, and reflective vests. Other PPE (i.e. gloves, eye and ear protection ... etc.) to be used as appropriate
- Materials and equipment are tidily stacked, protected and covered where necessary. Additionally, there is adequate space for new materials to be stored in secured covered areas to avoid damage, theft, and to protect these items from weather conditions.
- Scaffolding for work in elevated areas such as ceiling painting should comply with the OSHA “General Requirements for Scaffolds §1926.451”

### **Handling Complaints**

- Reducing impacts on the community through community and neighbour engagement.
- In cases of where there are minority communities speaking a different language in the area or working on site, notices are printed in the common local language.
- Provide the proper GRM for handling complaints

### **Physical, Cultural resources**

- In case of accidental discovery stop all works and contact the responsible authority within 24 hours;
- Provide training to the construction crew on the mode of conduct in case of accidental findings

Chance find procedures will be used as follows:

Stop the construction activities in the area of the chance find;

- Delineate the discovered site or area;

- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the Ministry of Culture take over;
- Notify the supervisory Engineer who in turn will notify the responsible local authorities and the Ministry of Culture immediately (within 24 hours or less);
- Responsible local authorities and the Ministry of Culture would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists from the Department of Antiquities and the Ministry of Culture (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
- Decisions on how to handle the finding shall be taken by the responsible authorities from DA and the Ministry of Culture. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
- Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Ministry of Culture; and
- Construction work could resume only after permission is given from the responsible local authorities and the Ministry of Culture concerning safeguard of the heritage.

## تدابير الحد من الأخطار اثناء مرحلة البناء

قائمة بإجراءات تخفيف المخاطر خلال أعمال إعادة التأهيل:

### الشروط العامة:

- أ. لقد أبلغت الجهات الرقابية المسؤولة عن أعمال التشييد والبيئة بالنشاط المرتقب للمشروع.
- ب. لقد أبلغ الجمهور بالأعمال المرتقبة من خلال الوسائط الإعلامية وكذلك / أو المواقع الإلكترونية ومن ضمنها موقع رب العمل.
- ت. تم استكمال إصدار كافة الرخص القانونية والأصولية لإجازة أعمال البناء و/ أو إعادة التأهيل.

- ث. وافق المقاول رسمياً على أن ينجز الأعمال وفق ضوابط السلامة لتقليل المؤثرات على المقيمين بالجوار وعلى البيئة.
- ج. أن تكون وقاية العاملين تتطابق مع التطبيقات العالمية (دائماً بقبعة صلبة، أقنعة حسب الحاجة، نظارة السلامة، طاقم العمل، وجزم للسلامة).
- ح. لوحات معلقة لبيان أقرب مركز شرطة وأقرب مستشفى (مع توفير تسهيلات الطوارئ والحوادث).
- خ. على المقاول أن يتخذ الخطوات المعقولة لمنع دخول غير المخولين إلى موقع العمل.
- د. التدريب على التعامل مع المواد الحربية القابلة للانفجار وتلك غير المنفصلة.
- ذ. تجنب حرق المواد داخل موقع العمل.
- ر. تجهيز مناطق مختلفة من موقع العمل بأطقم (الإسعافات الأولية) ومجهزة بعدد ملائم من المحتويات تتناسب مع عدد العاملين. ينبغي إعلام كافة العاملين في الموقع بإمكانة أطقم (الإسعافات الأولية).
- ز. تجهيز موقع العمل بمطافئ الحريق.
- س. في حالة استعمال مواد قابلة للاشتعال يجب منع التدخين وعدم السماح بالاستمرار في الأعمال الموقعية المجاورة الأخرى ذات الصلة بمصادر انبعاث قذحات نارية.
- ش. تحديد حدود الموقع بنصب مواد محددة (حواجز، أشرطة أو أسيجة).
- ص. تأشير مواقع الحفر بنصب مواد محددة (حواجز، أشرطة أو أسيجة).
- ض. على المقاول أن يضع حواجز أو أغطية لمساحات الفتحات والحفريات.
- ط. خزن مواد البناء (كالأنابيب، إطارات أغطية المجاري، وأكياس السمنت) بشكل يمنع انقلابها ودحرجتها).
- ظ. تصان المماشي والسلام خاوية من العوثر الخطرة كالأسلاك المسحوبة والمواد الإنشائية والأنقاض.
- ع. تكون لكافة العاملين وفي أية منطقة عمل سهولة الوصول إلى مرافق قضاء الحاجة والاعتسال، وحيز لتحضير وتناول المرطبات ومساحة لخرن وتجفيف الملابس وعدة الوقاية الشخصية.
- غ. على المقاول التأكد باستخدام وعدة الوقاية الشخصية من جميع العاملين في الموقع.
- ف. تكدس المواد والمعدات بعناية والحماية من التلف وتغطي أينما كان ضرورياً، بالإضافة تحدد إمكانية خزن مغطاة لمواد جديدة لتجنب تلفها، وسرقتها وكذلك لحمايتها من الظروف المناخية.
- ق. يجب أن تدعن صلاحية السقالات ( السكالات ) المستعملة للوصول إلى مناطق العمل المرتفعة كصبغ السقوف لنشرة المتطلبات العامة للسقالات (١٩٢٦, ٤٥١).

ك. لوائح ملائمة ومعلقة في مناطق العمل للإبلاغ العاملين بالقواعد الرئيسية والتعليمات الواجب إتباعها.

### جودة الهواء:

#### انبعاثات المركبات

- ✍ على المقاول أن يستخدم الآليات و المعدات بشكل سليم و يتأكد من صيانتها .
- ✍ على المقاول أن يقلل من تشغيل المركبات الغير ضروري .
- ✍ أن يطفى المحركات بعد استخدامها .

#### الغبار

- ✍ أن يقلل من انبعاث الغبار من المواد (مثل الرمل و الإسمنت) و أنشطة البناء باستخدام أغطية أو تخزين أو معدات تحكم و زيادة محتوى الرطوبة
- ✍ تحضير الإسمنت قبل الذهاب الى الموقع للحد من عملية نقل المواد (حصى، رمل، اسمنت) اذا كان ذلك ممكنا
- ✍ تقليل الغبار الناتج عن حركة المركبات باستخدام رش المياه حسب الحاجة
- ✍ تجنب حرق المواد في الموقع
- ✍ اطفاء المحركات بمجرد الانتهاء من استخدامها

#### الانبعاثات الخطرة

- ✍ تجنب تخزين المواد الخطرة في الأماكن المفتوحة بدون غطاء لائق
- ✍ توفير تهوية كافية في مناطق العمل

#### إدارة الضوضاء و الاهتزازات

- ✍ تجنب أو التقليل من التنقل في المناطق المجتمعية
  - ✍ اطفاء المحركات بمجرد الانتهاء من استخدامها
  - ✍ على المقاول أن يقلل من تشغيل المركبات الغير ضروري
  - ✍ تقليل ضوضاء المعدات
  - ✍ فحوصات طبية اضافية للموظفين الذين يتعاملون مع معدات اهتزازية أو صاخبة
- إدارة مجاري المياه الموسمية (خطة تصريف المياه)

- ✍ على المواد الأولية المستخدمة في البناء و التي ممكن انجرافها بمجرى المياه الموسمية أن يتم توажدها و تخزينها في أماكن بعيدة عن مجاري المياه الموسمية
- ✍ ان كان مناسباً أو ممكناً جدولة الأعمال بحيث تتجنب المواسم المطرية (مثلاً في المواسم الجافة) و تعديل النشاطات أثناء الأمطار الغزيرة و الرياح العاتية

#### التربة

- ✍ التخلص من التربة الملوثة بنقلها بالشاحنات الى أقرب مكب مخول
- ✍ اذا كان الصرف السطحي يعيق عمليات البناء، ممكن استخدام الخنادق و السدود و / أو أكياس الرمل لتحويل مسار المياه عن مواقع الحفر
- ✍ على مهندس الموقع أن يراقب عن كثب الأحوال الجوية يومياً. لن يكون هناك أي اعمال انشائية في أجواء يسودها المطر الشديد أو الرياح القوية

#### النفايات الصلبة و الخطرة

- ✍ الحفاظ على الموقع نظيفاً و منظماً
- أ. التأكد من عدم وجود مواد أو حطام ملقاة بشكل عشوائي في الموقع أو في محيط الموقع
- ب. يجب فحص نظافة المركبات بشكل دوري (فحص شامل و التأكد من عدم التسريب)
- ✍ حرق النفايات ممنوع كلياً
- ✍ التقليل من نفايات البناء ذات الصلة بالبناء داخل الموقع و نفايات التصنيع خارج الموقع
- ✍ اعادة استخدام المواد في الموقع متى أمكن ذلك
- ✍ متابعة كمية النفايات الإنشائية في الموقع للتأكد من عدم تأثيرها على الموقع و المنطقة المحيطة
- أ. المخلفات لا تعيق الطرق
- ب. يتم جمع المخلفات الإنشائية في مكان محدد في الموقع
- ✍ على المقاول ازالة المخلفات الإنشائية بشكل دوري لأقرب مكب مصرح لبقااي تجمع النفايات داخل الموقع
- ✍ على جميع العاملين التقيد بعدم رمي النفايات
- ✍ وجود خزان للصرف الصحي للنفايات السائلة السكنية من معسكر الموقع و التي يجب التخلص منها دوريا الى محطات المعالجة

### المواد الخطرة

- ✍ تزويد الموقع بحاويات لحفظ الوقود و المواد الأخرى مثل زيوت التشحيم و الزيوت الهيدروليكية
- ✍ استخدام أرضية منيعة (غير قابلة للتسريب) في مناطق تزويد الوقود و التحويل
- ✍ تزويد آليات لمكافحة التسرب و أعمال التنظيف و تدريب فريق العمل على استخدامها بشكل آمن
- ✍ تزويد مرافق الصرف الصحي المناسبة لخدمة جميع العاملين في الموقع (كما هو مذكور في (HSE
- ✍ لن تستخدم الدهانات التي تحتوي على المواد السامة أو مذوبات أو دهانات ذات قاعدة الرصاص

### التنوع البيولوجي

- ✍ تدريب فريق العمل على التأثير الناتج عن خلخلة أو تدمير البيئة
- ✍ مراقبة فريق العمل و توفير تدابير عقابية ضد الصيد و / أو صيد السمك بشكل غير قانوني
- ✍ توفير وقود لفريق العمل ليتمكنوا من الطهي و حتى لا يلجؤوا الى حرق مواد طبيعية
- ✍ تطبيق خطة ادارة النفايات
- ✍ أعمال التجريف الدورية في مناطق السحب حول السدود المؤقتة لضمان العمق الكافي لمنع الدوامات حول السدود و التي تتسبب بعكر الماء
- ✍ المنع منعاً باتاً من التخلص من أي من النفايات بإلقائها في النهر
- ✍ لحماية الطبيعة و الأحياء الهشة في مناطق السحب، على أعمال البناء أن تبدأ في الموسم الجاف حيث منسوب مياه النهر في أدنى مستواها و موسم التكاثر قد قضى
- ✍ يجب على بناء السحب تحت الماء أن يكون على الأقل متر واحد تحت سطح الماء و سرعة التدفق لا تزيد عن ١,٥ متر/الثانية لتجنب سحب الأسماك الصغيرة

### الطبوغرافيا و التدفق السطحي

- ✍ مناطق لتخزين مواد البناء يجب أن تتواجد في الموقع و يجب أن لا تكون في مسار المياه لمنع الانجرافات و يجب أن تكون على أرضيات بميول أقل من ١,٥%
- ✍ يجب تحديد ساعات العمل في الأجواء الممطرة
- ✍ يجب صيانة المعدات و الآلات بشكل دوري للتأكد من عدم انسكاب المواد الخطرة
- ✍ يجب اعادة زراعة المناطق التي انتهى بها العمل
- ✍ يجب التخلص من النفايات الصلبة و السائلة و بشكل دوري في الأماكن المخصصة لذلك

## حركة المرور

- ✍ وضع اشارات تحذيرية في الموقع
- أ. تعليم ممرات المشاة الأمانة بحيث لا يعترضها مواد البناء
- ب. مدخل و مخرج الموقع معلمين بشكل واضح للزوار و لسائقي التوصيل
- ج. مكتب استعلامات الموقع واضحة و ارشادية و اذا لم توجد فيجب اصطحاب الزوار شخصيا لمكتب الاستعلامات
- ✍ تحديد أماكن اصطاف مركبات الزوار و العاملين خارج منطقة العمل
- ✍ تجنب أو قلل من السياقة عبر المناطق السكنية
- ✍ نظام ادارة السير و تدريب العمال و خصوصا عند مداخل الموقع و عند اختناق السير قرب الموقع
- ✍ تعديل ساعات العمل لتناسب حركة المرور المحلية (مثل تجنب عمليات النقل الثقيلة أثناء ساعات الذروة أو عند تحرك الماشية

## الصحة و السلامة

- ✍ وضع اشارات تحذيرية كافية لمنع حوادث مثل السقوط الفجائي في المناطق المفتوحة
- ✍ تسييج منطقة العمل (HSE)
- ✍ وضع اشارات واضحة للإدلال على أقرب مركز أمني و مشفى به قسم حوادث و طوارئ
- ✍ على المقاول اتخاذ التدابير الازمة لمنع الزوار الغير مصرح لهم بالدخول للموقع
- ✍ التدريب على معالجة أسلحة الحرب الغير منفجرة
- ✍ تجنب حرق المواد في الموقع
- ✍ وضع حقائب اسعافات أولية في أماكن مختلفة في الموقع بكميات تتناسب مع عدد العاملين في الموقع . يجب اعلام العاملين في الموقع عن مواقع حقائب الاسعافات الأولية
- ✍ وضع طفايات حريق في الموقع
- ✍ اذا استوجب العمل على استخدام مواد سريعة الاشتعال يجب منع التدخين في المنطقة و العمل على عزل المنطقة من كل ما قد يحدث شرارة
- ✍ تحديد مناطق المشروع بحدود ملموسة (مثل الحواجز أو الشريط اللاصق أو السور)
- ✍ تحديد مناطق الحفر بحدود ملموسة (مثل الحواجز أو الشريط اللاصق أو السور)
- ✍ على المقاول أن يضع علامات تحذيرية أو أغطية على الأماكن المفتوحة و أماكن الحفر
- ✍ تخزين مواد البناء (أنابيب، أغطية مناهل، أكياس أسمنت) بشكل عملي حتى لا تنزلق المواد و تتبعثر
- ✍ ابقاء ممرات المشاة و الدرج خالية من مواد البناء و الحطام
- ✍ كل من يعمل في الموقع له الحق باستخدام حمامات و مغاسل كافية، و مكان للشرب و مكان لتغيير و تجفيف الملابس و لتخزين أدوات الحماية الشخصية (PPE)
- ✍ على المقاول العمل على جعل العمال استخدام أدوات الحماية الشخصية (PPE) في الموقع
- ✍ يجب تخزين المواد و الآليات بشكل منظم و حمايتها و تغطيتها ان لزم الأمر. و كذلك يجب التأكد من وجود أماكن كافية لتخزين المواد الجديدة و حمايتها من التلف و السرقة و عوامل الطقس
- ✍ يجب على السقالات المعلقة و المستخدمة في الأماكن المرتفعة مثل طلاء الأسقف أن تمتثل لشروط OSHA (المتطلبات الأساسية للسقالات 1926, 451)

## التعامل مع الشكاوي

- ✍ تقليل الضرر على المجتمع المحلي من خلال التفاعل مع المجتمع و الجار.



في حال وجود أقليات في المجتمع المحلي المجاور أو يعملون في المشروع ممن يتكلمون لغة أخرى، يجب مخاطبتهم كتابيا بلغتهم المحلية  
الموارد العينية و الثقافية

في حال الاكتشاف العرضي ، أوقف جميع الأعمال في الموقع و تواصل مع الأجهزة المعنية خلال ٢٤ ساعة

قم بتدريب الكادر على طريقة التعامل المثلى في حال الاكتشافات العرضية مع الالتزام بالاشتراطات التالية:

### الإجراءات الخاصة بالعثور على الاكتشافات الأثرية عن طريق الصدفة

يتم استخدام الإجراءات الخاصة بالعثور على الاكتشافات الأثرية عن طريق الصدفة على النحو التالي:

- أ. وقف أنشطة البناء في منطقة العثور على اكتشافات أثرية عن طريق الصدفة
- ب. تحديد الموقع المكتشف أو المنطقة المكتشفة
- ج. تأمين الموقع لمنع وقوع أية أضرار أو فقدان الأشياء المنقولة. وبالنسبة للآثار القديمة المنقولة أو الآثار الحساسة، سيتم تعيين حارس ليلى لحين قدوم السلطات المحلية المسؤولة ووزارة الثقافة لاستلامها
- د. إخطار المهندس المشرف الذي يقوم بدوره على الفور بإخطار السلطات المحلية المسؤولة ووزارة الثقافة (في خلال ٢٤ ساعة أو أقل)
- هـ. تكون السلطات المحلية المختصة ووزارة الثقافة مسؤولة عن حماية وحفظ الموقع قبل اتخاذ قرار بشأن الإجراءات الملائمة لاحقاً. ويتطلب ذلك إجراء تقييم أولي للمكتشفات من قبل خبراء الآثار بوزارة الثقافة (خلال ٧٢ ساعة). ويجب تقييم أهمية المكتشفات طبقاً للمعايير المختلفة للتراث الحضاري التي تشمل القيمة الجمالية والتاريخية والعلمية والبحثية والاجتماعية والاقتصادية
- و. يتم اتخاذ القرارات المعنية بكيفية التصرف في المكتشفات من قبل السلطات المختصة ووزارة الثقافة. ويمكن أن يتضمن ذلك تغييرات في الشكل والتصميم (مثلما هو الحال عند العثور على آثار ثقافية غير قابلة للنقل أو ذات أهمية أثرية) والحفظ والصيانة والاستعادة والإنقاذ
- ز. تقوم وزارة الثقافة بتقديم بيان كتابي حول تنفيذ القرار المتخذ من قبل السلطة المختصة بشأن إدارة الاكتشافات التي تم العثور عليها
- ح. لا يمكن استئناف أعمال البناء إلا بعد الحصول على تصريح بذلك من السلطات المحلية المختصة ووزارة الثقافة من أجل حماية التراث.

ANNEX (5): Electrical grid Lines Photos





